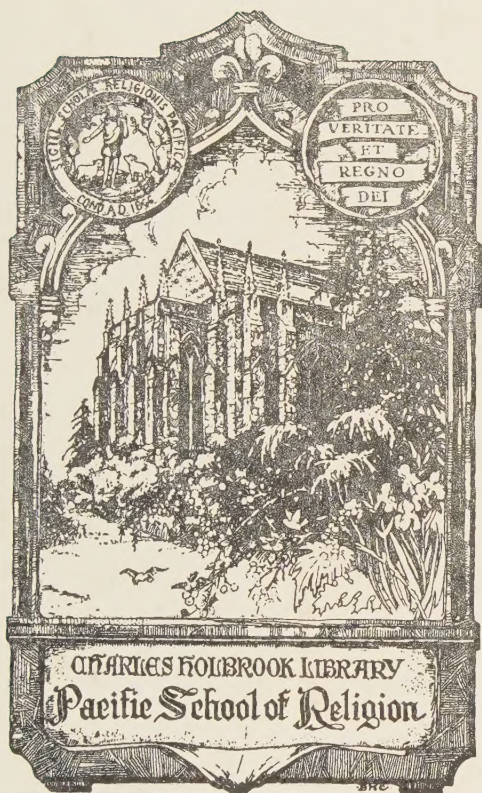


Vocational Guidance of Theological Students:
A Manual for the use of the
THEOLOGICAL SCHOOL INVENTORY



MINISTRY STUDIES BOARD
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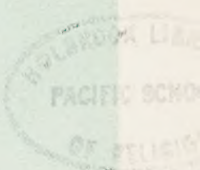
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DIRECTED BY
FREDERICK R. KLING
SUPPORTED BY
LILLY ENDOWMENT,
INC.


vocational guidance of theological students

JAMES E. DITTES

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Preface

To begin to "study for the ministry" must seem--to those who haven't done it--an enviable moment of commitment, the consummation of a decision, the beginning of a life-time course firmly established and pursued with confidence and certainty.

First-year theological students do generally possess substantial amounts of clarity and certainty about themselves, their faith, and their general vocational direction. But no one knows better than they do themselves how much indecision and ambiguity remain. They stand in the rich and vital tradition of their faith in which classic Christian documents and forceful careers of church leadership have been forged out of agonized, tormented and prolonged vocational indecision ... Augustine searching among the Mediterranean academies ... Luther in agony while returning to law school, and still years later while serving his first mass ... Wesley trying to balance scholarly, pastoral, and evangelistic interests in colonial Georgia. Or could any vocational agonies have been greater than those of such Old Testament prophets as Isaiah or Jeremiah, or of the Apostles themselves in the hours and years just after the Crucifixion.

Though the basic agony, and the haunting failure of final certainty remain the same, the terms and issues change with every generation and must be re-fought by each individual who ventures to answer a call to the Lord's ministry. Questions in our day seem to go like this: What is the true nature of the church and its ministry? How faithful or unfaithful is the present institution of the church to its calling? Can I find a relevant and effective ministry within the present forms of the church? Or to be faithful to Christ and His Gospel, must I rebuke and reject the type of parish ministry to which I once felt called? How shall I choose and define a relevant and faithful form of the ministry? What right have I to judge? Who am I? What am I good for? Do I have any talents that can serve my Lord and His people? Do I really want to do it for His glory, or for mine? How am I to be sure that He has called me? --Such torments will not seem alien to any faithful and thoughtful theological student. The mission he contemplates is too awesome, at once too remote and too intimate to withstand easy, glib, pat, and mechanical formulations.

Further, the institution of the church and its ministry is too much challenged and too agonizingly reappraised by Protestant Americans--especially his fellows and his teachers in theological schools--for him to find a clear, sharp vocational niche. When the student picks up books on the nature of the church, he is more likely to find debate than direction, more likely to find ambiguities than affirmations. The challenge of the viability of the parish ministry and the debate over its proper form is carried on by no one so much as by the leaders and successful practitioners within the church. Every new book on the "renewal" of the church only extends the debate and adds one more alternative to the "unorganized brush pile", as one denomination's "committee on the nature of the ministry" has characterized the object of its study.¹ Books on "the purpose of the church and its ministry" are consistently more convincing in their diagnosis of the "perplexed profession"² than in their charting of the way out.

Given such widespread and clamoring uncertainty about the nature of the ministry, the entering student can be permitted his share of doubt as to how and whether he fits in. He can be excused his own wistful glance at predecessors of a generation ago, for surely, it seems, these must have enjoyed an enviable certainty of purpose and direction.

Yet thirty years ago, Mark May could vividly call attention to "this lack of a clear definition of the functions of the pastor that can be widely accepted." He added, "The work of the lawyer,

¹ Page v of The Church and Its Changing Ministry, edited by Robert Clyde Johnson as study material for the United Presbyterian Church, U.S.A. (1961). The preface begins with the announcement, "It is news to no one that there is a pervasive uncertainty in the American Protestant Church about the nature and task of the Christian ministry."

² A section title used by H. Richard Niebuhr in his book The Purpose of the Church and Its Ministry (Harper, 1956).

the physician, the teacher, the artist, the writer, and the engineer, is clear cut and rather sharply defined (at least in the mind of the average man), so that when a young man chooses one of these professions he has some idea of what he is getting into. But not so with the ministry. Entering the ministry is more like entering the army, where one never knows where he will land or live or what specific work he will be called upon to perform."¹

Fortunately, to carry on this debate profitably, to test his call, and to determine the directions of his own ministry, the entering theological student has many resources. He brings with him into seminary rich resources of experience, faith, knowledge, and the sustaining guidance of others. He finds in seminary other resources, including new definition of and confrontation with the demands of Scripture, the predicaments of contemporary men, the potentialities and the futilities of various attempts at ministry.

To this task of vocational definition, which pervades all of a student's theological education and ministry, the Theological School Inventory offers one additional and special resource: an objective arraying of the "motives" which a student feels have brought him to theological education.

To Mark May's comparison between enlistment in the army and the call to the ministry we can add one more uncertainty, which often characterizes both acts: uncertainty as to why one has enlisted. Enlistment may stem from firm, even fervent, commitment, yet still involve ambiguities as to specific motivation and purpose. What particular inner promptings, past experiences, influences, sense of personal abilities, sensitivity to needs and possibilities of ministry have brought the student to this point of encounter with theological education? If he can better know these things, he may be more prepared to confront and benefit from the resources of the school, in the mutual task of shaping and sharpening his vocational definition. It is the purpose of the TSI to help reduce some of the student's personal ambiguities about his vocation.

In the six years in which the test has been used, in varying forms, by several thousand theological students, evidence has accumulated to justify confidence that the TSI can, in fact, serve this purpose.

Students characteristically report that taking the TSI is an exhausting but satisfying experience. Some have said that they have been forced to think more carefully and precisely than ever before about aspects of their vocational decisions, and that this has been on significant questions, forcing meaningful distinctions not previously made. Other students report a similar experience in connection with their discussion of TSI scores with a counselor. Counselors in seminaries, generally, report a utility for the test and have also helped define some of its limitations. The manual is based, in part, on consultation with several dozen seminary faculty members who have administered the TSI and counseled with students about their scores.

The years of preliminary use of the TSI have also allowed for the systematic accumulation of a reasonably satisfactory body of data to help confirm and refine the definitions and interpretations of the scales. These research studies and their data are reported in a series of research bulletins in supplement to this manual. Discussion and interpretation of these data, for all of the studies completed to date, are included in the text of the manual. Further research is planned, and is invited, to be reported in future Theological School Inventory Research Bulletins and to be considered in future editions of this manual.

¹ Mark A. May, *The Education of American Ministers* (New York: Institute of Social and Religious Research, 1934). Vol. II, p. 389. May's catalog of symptoms sounds surprisingly contemporary and includes "the restlessness in the ministry, especially among trained men, the increasing tendency for seminary graduates to enter non-pastoral types of work, . . . the conflict between what the denominations and the local officials expect of the pastor. . . . The changes that have taken place in the lives of the American people during the past fifty years demand a new conception of the minister and the functions that he should perform." Pp. 386f.

Acknowledgements

Frederick R. Kling was director of the Ministry Study of the Educational Testing Service, beginning in 1957, throughout the years in which the Theological School Inventory was devised and developed. From the time of the creation of the Ministry Studies Board, to succeed the Ministry Study at ETS, he has been a member of its Board of Trustees, and was its first secretary-treasurer. In the context of the collaborative research staff of ETS and of the advisory board, he may be regarded as the creator of the test. The strengths of the test are due to Kling, especially its psychometric rigor, conceptual soundness, practical utility, and its deep sensitivity to actual vocational dilemmas of ministerial candidates.

At several points in the development of the test, Harry A. DeWire worked closely with Kling as a consultant and collaborator.

This manual has borrowed directly and profited indirectly from Kling's earlier writings about the test. Some paragraphs are taken from the earlier Manual of Instructions published by the Ministry Studies Board in 1962, and prepared by Harry A. DeWire, in collaboration with Frederick R. Kling and James E. Dittes.

The Ministry Study and the work of the Ministry Studies Board have been supported generously by the Lilly Endowment, Inc. Full development of the TSI and completion of this manual have been possible only because of ETS' continued interest in the project, long after formal termination of the Ministry Study, and transfer of responsibility to the Ministry Studies Board.

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1. GENERAL DESCRIPTION

The Theological School Inventory provides a description of the motives which a candidate for the Protestant ministry regards as instrumental in his vocational decision. It is a self-report psychological measuring instrument designed specifically for the guidance of students who are beginning professional preparation in a theological school. It may be regarded as a relatively unsophisticated instrument insofar as it draws no explicit attention to processes of personality dynamics or to such criteria as "mental health" or "effectiveness" of ministry. It may be regarded as a highly sophisticated instrument insofar as it acknowledges and helps to articulate many of the subtle queries and concerns a ministerial candidate may have about his vocational decision--or others may have on his behalf.

The test frankly deals with the nature of the "call" to the ministry. While it recognizes that God extends his "call" to those who are to serve His church, it also assumes that God "calls" through many and varied social and personality channels. Moreover, experience has shown that many persons who feel called to the ministry are, in reality, responding to pressures, external or internal, which ultimately prove to be misleading.

The following paragraphs of introductory description will elaborate the words underlined in the opening paragraph.¹

Motives:

In measuring consciously perceived and reported motivation for the ministry, the TSI taps an aspect of personality different from that assessed by other tests. It is not meant to assess psychological pathology or the health of an individual, or the "normality" of his motives, as in some uses of the Minnesota Multiphasic Personality Inventory. It is not meant to measure basic personality characteristics or general psychological motives, as, for example, the Edwards Personal Preference Schedule may be used. It is not meant to assess ability or aptitude for the ministry or any of its aspects, as, for example, is the case with the Graduate Record Examination, the Miller Analogies Test, reading tests, speaking proficiency tests, or as certain personality tests are sometimes, perhaps invalidly, used.²

The TSI is most closely related to the family of interest tests, but is intended to be narrower, deeper, and less "predictive" than such a test as the Strong Vocational Interest Blank. It does not assess the broad range of possible personal interests; it does attempt to make fine distinctions within the range of professional interest in the ministry. Unlike the Strong Vocational Interest Blank, no attempt is made to predict the suitability or likelihood of a particular pattern of scores for a particular successful vocational decision.

Motives are to be understood as conscious reasons, not psychological needs. "Motives", as measured by the TSI, refer to the conscious rationale a person constructs for deciding upon or pursuing a course of action. The TSI is not designed to discover or measure

¹ It is hoped that most readers will find that the general interpretive description of the test on the first several pages will provide an illuminating context for understanding the more specific description of the test and its scales, which follows. However, those with no previous familiarity with the test, may find this first section more intelligible if they turn first to Section 4 and Appendix I and look briefly over the description there given of the particular scales of the test.

² Sometimes users assign the TSI a task for which it is not intended, by supposing, for example, that the I scale measures intellectual ability, rather than an interest in intellectual issues, or by supposing that either a high or low Special Leading score is preferable or normative. The test designers do not regard either special leading or natural leading as a preferable interpretation of the call. (For a candidate himself, this is sometimes a question, and the Call Concept scale is intended to help him express his preferences.)

psychological needs or tensions, commonly unconscious, which may be prompting decisions and actions. The motives measured by this instrument are those which are commonly discussed and considered by candidates or prospective candidates for the ministry. The items and the names of the scales can be recognized and acknowledged by them as familiar and genuinely relevant to the terms in which they consider their call to the ministry. A student can take the test and discuss its results without ordinarily experiencing any threat to the integrity of his person or his call, or without experiencing a need to be defensive by inhibiting or distorting his responses to the TSI questions. The counselor, in turn, need not attempt to be shrewd or evasive.

Subconscious psychological processes and motives need not be ignored in interpreting results of the TSI. Like any other conscious and overt behavior, TSI results can become the basis for raising questions or making particular inferences about subconscious processes and motives. The TSI summarizes a descriptive conscious report; it does not answer why, or explain the basis for such self-review, in terms of needs, personality dynamics, or motives such as wanting to conform, or to rebel. However, like any conscious overt behavior, it may raise questions about "why", or offer a basis for inference.

For example, in a particular case, a pattern of consciously reported motivation that resulted in high I (Intellectual concern) and D (Definiteness) scores, but low NL (Natural Leading), SL (Special Leading), E (Evangelistic witness), F (Self-fulfillment), and P (Service to Persons) scores might lead a counselor and/or the student himself to make the possible inference that the student is "clinging" with unconscious stubbornness to a decision or a call (high D) without any of the ordinary confirming types of motivations that may be expected to nourish a pastoral ministry, except an intellectual interest in religion (high I). Such an inference might be more plausible in the presence of other data, such as low FL (Flexibility) score (suggesting perhaps more personal rigidity), evidence on such items of Section I as 15, 18, 25, 34, 35, 36, 43, 52, suggesting early influence and decision for the ministry, along with evidence on such items as 9-12, 51, 55, of a changing pattern of interests away from those usually associated with divinity students.

Range of conscious motives. The constructors of the TSI have made an effort not to avoid any of the types of motivations that are commonly considered in connection with the vocational decision for the Protestant ministry. As described more fully in Section 3, the categories of the test are based on a full content analysis of the statements which a sample of ministers actually made about their vocational decision, under conditions in which there is reason to believe the respondents were thoughtful and candid.

Section I asks the student a number of direct questions concerning his motivation, the history of his decision, his definiteness, and his present preferences as to a specific form of ministry. It also asks other background questions selected to place the test scores of the individual student into a meaningful perspective.

Section II includes a diversity of motivational concepts which is perhaps the most difficult both for test makers and test takers to acknowledge and to incorporate within the same instrument. This section undertakes to deal frankly--and to allow the student to deal frankly--with the degree to which the student feels that his "call" is immediately and personally communicated from God and/or the degree that the call is mediated through experiences in which the student must evaluate his own abilities and skills and preferences, in the light of particular requirements of the vocation. Although both these understandings of the call ("special leading" and "natural leading") are generally acknowledged as potentially valid, there is considerable distinction between them, and some individuals or groups are likely to have decided preferences for one or the other. Therefore, considerable effort has been expended in developing the test to present items which unambiguously represent both of these discrete points of view but which eliminate unnecessarily judgmental overtones and implications, pro or con, which would unfairly "force" or contaminate a student's response. The result is a set of items on which students' scores vary considerably, presumably representing the actual wide range of self-perceptions, even within the relatively homogeneous population of seminary students.

More complete descriptions of the actual scales follow in Section 4 of this manual.

Section III poses a range of possible demands--from routine administrative duties to personal sacrifice--which will be encountered in a typical ministry. It allows the student to state which he is likely to meet with ease and which with discomfort.

Section IV allows a student to consider both inner and external factors in discussing his decision to enter the ministry. The array of items and scales allows him to report both the personal needs and the needs of the church which have influenced his vocational decision.

A self-report instrument:

Items on the TSI are intended to be taken at face value. Neither the student nor his counselors should have the impression that by saying one thing in response to a test item, he is actually and indirectly revealing something else about himself--something esoteric and probably uncomplimentary--which can be known only by a trained test-interpreter armed with the proper decoding book.

The language and categories of the test should be recognized by the student as meaningful and important, as they are likely to be terms with which he has already reflected on his vocational decision, or else terms which he welcomes to clarify and articulate his previous thinking. The TSI tends to be, in sophistication of vocational reflection, just a step ahead of most entering theological students. This is deliberately so, and is one of the reasons that the test is particularly, if not peculiarly, suited to this group. But even though a step ahead of the student, the TSI uses categories which can be recognized by an entering student as genuinely meaningful and fairly comprehensive, whether or not he has previously made use of them. The language of the items and the concepts of the scales are directly drawn from and refer immediately back into experience like his.

Just as this is true of the items that the student confronts when he takes the test, it is also true of the scale designations that he may confront when discussing results. The scales can be defined by reference to the items which compose them. It is for this reason that Appendix I -- listing the items which appear on each scale -- is also published separately so that a copy can be shared with the student during discussion of the results. (See Section 7 below for further suggestions as to how this procedure may be useful.) As an alternative, the student may simply be given a marked copy of the test to consult, as a reminder of the items.

The scales have been derived from a content analysis of statements that ministers actually make about their motivation. The natural distinctions and categories into which the sample of ministers' statements arranged themselves became the scales of the TSI. The scale designations do not refer to any preconceived notions or theories which might seem alien, artificial, or threatening to a student, and which would require independent external validating evidence with which to define the meaning of the scales and to defend the definition.

Face validity primary. The scales of the TSI are not defined and validated by reference to any external reference group. In this, the TSI contrasts with the Minnesota Multiphasic Personality Inventory and the Strong Vocational Interest Blank, with which seminary testers are most likely to be familiar. The scales on both of the latter tests were derived, defined, and validated by noting empirically which items, from a large initial pool of items, were answered in a similar way by a previously identified group of persons (identified by psychiatrists' diagnostic labels, in the case of the MMPI, and by the self-selective membership in a vocational group, in the case of the SVIB). In these tests, it is not necessarily evident to either test-taker or interpreter (or even test-maker) why an item, worded in a particular way, should be part of a scale that is regarded as measuring, e.g., "depression" or "interest in the ministry".

Thus, on the MMPI and the SVIB the face validity of items is incidental, if it is apparent at all. On the TSI, the face validity of the scales is primary. In claiming to describe objectively the conscious motivational concerns of a student, the TSI must rest its claims for validity primarily on a student's recognition that the score profile faithfully does represent his self-perception. TSI Research Bulletin # 2 below presents validity data suggesting that this is indeed the case,

that the TSI scores do appear to reflect students' motivations, as they see themselves, and as they are seen by interviewers.

There is no single simple question about a student which the scores on the TSI can be added up to answer--as, for example, Strong scores tend to be used to answer the question: "Is he likely to be a successful (or satisfied) minister?" and MMPI profiles are studies to answer the question: "Is he healthy?" The TSI scores must be left as complex and as irreducible as any answer to the question: "Why are you entering theological school?"

"Extensional" validity. External "predictive" validity, to the degree that it is available, or desirable to discover through research, develops naturally from an extension of the obvious face validity. Perhaps this may be termed "extensional" validity. For example, Sections 4 and 8 below and TSI Research Bulletins # 1 and # 3 report some evidence suggesting a relationship between low scores on D, NL, or SL scales and dropping out of seminary or not entering the parish ministry. Since high scores on these scales may be regarded--at face value of the items--as ways in which the student may indicate that he feels strongly motivated to be a minister, the expectation follows naturally that low D, NL, and SL scorers may be less likely to persist into the ministry.

Such external validity data can be presented to students in discussing their results without appearing to raise mysterious, esoteric, or threatening interpretations. If in counseling, one reflects to a student that his low D, NL and SL scores indicate that he has not affirmed a strong motivation for the ministry with any of these categories, it is a natural next step to add the information--if it seems appropriate, given local validation and assuming the ability to understand probability--that persons who score so low are less likely to stay in school than those who score high. Such extensional validity data is hardly more than a restatement of the primary face validity.

Possible bases for irrelevance of TSI to particular students. Although the TSI avoids grounds on which the student may feel that it is unintelligible or threatening, it should be acknowledged that some students may find that the test is irrelevant to their chief vocational queries or quandaries. It is possible for a particular student and his counselor to find that the motivational concerns which the test more or less accurately reflects are minor ones for him and that his major questions or motivations do not appear to be touched by the test. Some such instances have been reported.

Any incompleteness, "irrelevance" or failure of the test to touch genuine motivational concerns of a theological student must result from a difference between the student and the sample of ministers whose statements lie behind the test. While individual exceptions from any standardized,

¹ Intended primarily as a guidance instrument, the TSI is, of course, potentially useful in research, on the possibility that it may appear important to a particular theory or to fuller understanding of theological students or clergymen, to discover a relation between particular scales of the TSI and some other variables. Such research may in the future discover a firm relationship between a TSI scale and some other variable which goes far beyond the kinds of face or "extensional" validity discussed above and provides a relationship essentially "mysterious and esoteric". This could provide the basis for a major increment to our theoretical understanding of the processes of selection and decision-making in choosing for a theological vocation. It might also eventually aid in the guidance of theological students. But such surprise relationships are not likely and probably their pursuit ought not to be encouraged. There is a tendency in the history of psychological research--illustrated very clearly with the MMPI or with the Taylor Manifest Anxiety Test--for the introduction of an apparently reliable measuring instrument to lead to much buckshot theoretically unenlightened and unenlightening research. It may be hoped that the TSI will not seduce researchers from the hard conceptual labor of careful theoretical development nor distract them from their proper task of devising measuring instruments appropriate to their particular research purpose. There may be occasionally hypotheses and research designs for which the TSI may be appropriately used as a measuring instrument, but they will, alas, probably be far fewer than the occasions on which it is actually used in a research study.

modal representation of a group are always to be expected, there may be certain systematic differences between the original sample of ministers and contemporary theological students which need to be recognized. One of them concerns the difference in age and maturity. The other concerns almost ten years difference in time between the ministers' statements and the present use of the test--or the one to four decades since the time those ministers were entering theological study.

The greater maturity of the ministers whose statements were sampled to produce the TSI generally accrues to the advantage of the test. It is probably the major reason that the TSI is able to be a step ahead of theological students and to help advance and clarify their own understanding of their vocation. However, it is possible that ministers who have completed their formal education and become established in their profession tend to overlook, elide, or even repress concerns or questions which were genuine, perhaps even burning, as they began theological education. Part of this possibility was reduced in the development of the test by checking the ministers' written statements against the tape recordings of long, relaxed interviews in which presumably less accessible and more remote material would have been produced. And counseling sessions with students on the basis of TSI results have not yet produced any tangible suggestions of such "youth-bound", overlooked areas of motivational concern. Nevertheless, the possibility of irrelevancy remains, and a counselor should not be surprised if discussion of TSI categories fails to generate interest or response--to be distinguished from generation of resistance and avoidance, which requires a much different psychological interpretation.

Changing times? More serious, perhaps, is the possibility that the present form of the TSI may gradually become obsolete to the degree that conceptions of the ministry change, and with them motivational concerns and questions.¹ Such a change may be taking place in the present generation.

One major trend, for example, is a de-emphasis among some theological students of a conception of the professional ministry as so uniquely and radically set apart from laymen. A Protestant principle is being emphasized, denying that commitment to full-time professional Christian service is necessarily the highest and most glorious form of Christian response to God. The "ministry of the laity" is being taken increasingly seriously, and with it the possibility that the student may be almost equally called by God as a lay or as an ordained Christian leader and equally of service to His church in either role. The "call" to which the "natural leading" and "special leading" items refer may equally be to lay or to full-time professional leadership.

This dilemma is often related to anti-institutional attitudes which are sometimes characterized as "pro-Christ, anti-church" sentiments. Students may feel committed to a form of Christian service, but may question (aided by such writers as Soren Kierkegaard, Dietrich Bonhoeffer, Peter Berger and Gibson Winter) whether one can be most faithful to the Christian call by remaining within the contemporary institutional church.

In such a context as this, the prospective candidate for the ministry may be confronting questions and possibilities to which the TSI, particularly Section II, may seem irrelevant and useless. (Section III and Section IV are perhaps more likely to help articulate concerns still relevant in such circumstances.)

To define irrelevance may help to guide the student. The most that can be claimed for the TSI, in these circumstances, is that, as with any attempt to make inner dispositions and attitudes explicit, it may serve well to force a clearer and more explicit definition of alternatives. A student, in responding to and protesting the irrelevance of the TSI, may be richly aided in making clearer just what his own particular concerns are. It is just because the TSI does aim so squarely at the target of motivation for the ministry that a particular student may be aided in explaining how far and in which direction it has missed the mark, so far as he is concerned. Such discussion is as legitimate a use of the TSI as is a careful discussion of its intended scales.

¹ Appreciation is expressed to Walter Holcomb of Boston University for making this point clear.

Primarily for guidance:

Either the taking of the TSI or the discussion of its results may become the starting point--or an adjunct, if discussion is occasioned later--for a franker and clearer discussion by the student--with himself, with friends, or with a counselor--about ambiguities in his vocational planning. The test may provide welcome objective clarity about one of the factors that needs to be considered as he makes future vocational decisions, namely his own motivations with regard to the ministry. It is assumed that further vocational decisions are to be made by the student--not by school or ecclesiastical authorities--and that he is the one most fully responsible to make the decisions and most capable of arriving at the proper or adequate decisions; that it is the student himself who is primarily entrusted with the responsibility for recognizing and responding properly to God's call and who is entrusted with more of the essential insights and understandings that need to go into the decision than is any other person.

Conscious motives, which the TSI records, represent only one factor which the student must consider. Many other factors will be involved, including abilities and personality characteristics (as these may be assessed by other tests or by actual experience), an understanding of the particular background and context of the student (as these may be indicated, in part, on Section I of the TSI), the demands, needs, opportunities of the particular church situation with which he is confronted, etc. In the present circumstances, the complex interaction of TSI scores and these many other factors can best be estimated by the student himself, using his own intuitive judgments and weighting.

Some of the interactions are susceptible, relatively readily, to empirical determination, and some relevant data are presented in this manual and its supplements. Hopefully, additional local norms and validity studies can be continued. The data which are presented in this manual, however, should be regarded as illustrative of two points: that there are meaningful and lawful patterns of subsequent behavior related in an expected way with TSI scores; and that these relationships are quite complex. Generalization from any reported finding to a particular student needs to be done with great caution, and with the expectation that the generalization is more likely to be wrong than right, especially if it is applied to a practical decision in a non-reflective manner. The link between TSI scores and decisions requires a careful filtering and evaluation of particular circumstances and of other variables. This is something which probably no one is in as good a position now to do as is the student himself.

The major contribution of the counselor ought not to be the attempt to make these decisions for the student, but to provide the atmosphere in which he can most honestly and forthrightly survey relevant considerations and reach his own decision. The qualities of the TSI contribute to the counselor's task at this point. Unless the test is approached with suspicions and mistrust which the student may have learned in connection with other psychological tests, the TSI generally evidences to the student a trust in his own ability to know and face himself and encouragement to do so. He discovers, that with the assistance of straightforward familiar categories of the test and without an elaborate, partially mysterious interpretive apparatus, he is able to understand many important aspects of himself.

Who should use the TSI?

Any person who administers the TSI and reports its results to students must have the following characteristics:

1. Formal training and supervised experience as a counselor, and the readiness to devote the necessary time to a continuing counseling relationship. Although the scores can readily be understood, in terms of their face validity--presumably even by the student himself, with the aid of certain sections of this manual and its appendices--the test finds its real utility in the context of continuing counseling. Any person who undertakes to report test results to a student should be prepared to maintain a counseling relationship which commonly develops out of such a report.

Obviously, the task of administering the TSI is basically routine and does not directly require

counseling skills. However, as explained further in Section 5, it seems advantageous to establish at the time of first encounter with the TSI, a proper appreciation of the nature of the test. This can ordinarily most easily be communicated with the disposition and experience of a counselor. It is also believed advantageous for a single "contact" person to be associated with the test from the student's first encounter.

2. A disposition and temperament consistent with the "open", mutually "respecting" mood which the first section of this manual has attempted to communicate. If the prospective administrator of the TSI finds himself inclined to seek and treasure secret insight about his students with which he conveys an impression that he knows more about them than they know about themselves, he may not find the TSI to his liking. It is an important contribution of the TSI that it encourages a calm, matter of fact, trustful and open attitude toward the discussion of vocational planning, and this ought not to be undermined by contrary attitudes conveyed by its administrator.

3. Sufficient sophistication in the understanding of test construction so as to be able to understand fully the statements of this manual and to be able to interpret them to students. This applies especially to the particular statistical properties of the scales, especially the ipsative characteristic of Section IV, the AIFLERP scales (see Section 4); the relevance and irrelevance of norms provided by various reference groups; the nature of validity claimed and not claimed for the scales.

4. Thorough familiarity with this manual.

Of the various systems for categorizing levels of tests, one has been adopted by the American Psychological Association designating three levels of tests requiring three levels of training and sophistication.¹ It is believed that the TSI should be regarded as a Level B test, a test which requires "some technical knowledge of test construction and use, and of supporting psychological and educational subjects..."

¹ "APA Code of Standards for Test Distribution", American Psychologist, November 1950.

2. CHARACTERISTIC USES

Some characteristic cases are presented here to supplement the description of the test by illustrating a range of situations in which it may prove of use. More systematic discussion of the utility of the test follows in Sections 7 and 8.

1. A student, entering seminary as a prematurely "professional" and superficially suave "boy preacher" who had pastored a church all through college, tended to give the impression on admission that his coming to seminary was largely a favor to the school. However, he became intensely involved with the seminary work and underwent a radical deepening of his faith and his conception of the ministry. He never sought his results on the TSI. But he later reported that the taking of the TSI had been a dramatic, if not traumatic, factor in his change of attitude, and in the development of his deeper, existential involvement with seminary. "I realized that they weren't fooling around here, not like the head-patting old folks in the churches. What you really were and really thought was important."

2. A student entered seminary in considerable inner, suppressed turmoil concerning his "lack of faith", his "trespass" and "presumption", and his alienation from God--which largely referred to the fact that he was entering seminary and the ministry without having received a clear, immediate, mystical call from God. He interpreted the absence of such a call as punishment or rejection by God, and he interpreted his own persistence into the ministry as a desperately presumptuous trespass about which he felt substantial guilt.

In taking the TSI, he experienced surprise and some welcome reassurance by the presence of the low SL (Special Leading) and low CC (Call Concept) items, although he tended to assume that these were "bad" items and that he was revealing his deficiencies and guilt in selecting them. The issue having become more explicit during the taking of the test, he sought his results and an interview. He found more reassurance in discovering that he had a high NL (Natural Leading) score and that this was apparently regarded by the test makers as a recognizable and acceptable basis for a "call", and further that his pattern of high NL and low SL scores was not unique and was shared by others, even within his own school, which he had not supposed was possible. With these objective facts in focus, his guilt feelings tended to become detached from the vocational problems and more clearly seen in relation to other personal problems. Now accessible, these, in turn, were somewhat dealt with in counseling and partially alleviated.

3. A student sought counseling in the early weeks of study in his denominational seminary because he was experiencing unwelcome feelings within himself. These consisted largely of a kind of rebellion against the seminary and its faculty and some personal resentment and antagonism toward his fellow students. He wondered if this lack of Christian love invalidated his call to the ministry. His TSI scores were consulted. Compared with the averages for his school, he was found to deviate on several scales, most notably with substantially lower CC (Call Concept) and higher I (Intellectual concern) scores than his classmates. As these scales were discussed, he recognized the validity of the deviate scores and reported that this helped him to verbalize frustrations which he had experienced in the seminary, but not so clearly recognized. His high I interest was not satisfied in this particular seminary and he resented the kind of pressure for conformity on attitudes associated with the high CC in his classmates.

In subsequent counseling, he considered transfer to another school, but decided to remain, on the basis of other values which he found in continuing in the school--including the possibility of exerting some modifying influence on the school and denomination. Recognizing these particular grounds for his personal dissatisfactions, he no longer generalized them so diffusely into other areas of his personal relations with peers and faculty. Particularly with respect to his I interest, he felt greater freedom to deviate from the implied school norms and to transmute some class assignments and bull sessions into more intellectually satisfying exercises. He also arranged some extra-curricular nourishment for his I motivations. He managed this tactfully, without snobbery, and succeeded--as might be suspected from his original anxious concern over disrupted personal relations--to maintain the goodwill and regard of others.

If it had been the practice in the seminary to discuss TSI results routinely with students, rather than waiting for students to initiate such discussion, the counselor would presumably have raised the question as to whether the student detected any consequences of his deviate CC and I scores, with presumably similar beneficial results. Conceivably, such a practice of routine review of TSI scores might "save" some students who would never take the initiative. However, it is also possible that unless a student "hurts" enough to seek counseling, he is not sufficiently motivated to warrant or to use such help.

4. In discussing TSI scores, a counselor called attention to the low NL (Natural Leading) score, the great number of B ("discomfort") responses in Section III, and the high peak on F (Self-fulfillment), with a relatively low plateau of the remaining AIFLERP scores. He described the scales briefly, and asked the student if this profile seemed a valid one. The student indicated that he did feel uncomfortable in most of the roles of the ministry but he felt that nevertheless he just had to be a minister (high F). (He later reported persistent headaches on Sundays, when he had field work responsibilities, and further inquiry established that reports from field work supervisors were critical of his performance.) The bases for this compulsion were explored in further counseling, partly in conjunction with a review of responses to Section I of the TSI (where strong family influence was apparent, though inconsistently reported). The student came to decide that he no longer wished to acknowledge the validity of this compulsion and his relatively blind and unnatural commitment to the ministry. He dropped out of school, entered another professional school, is actively involved in a campus church (without headaches) and looks forward to active lay leadership in the church.

5. A student's answer to question 42 indicated that he was "definite" about his decision to enter the ministry; the D (Definiteness) score was relatively high; but NL (Natural Leading) and SL (Special Leading) scores were both relatively low. After describing the scales briefly and suggesting that NL and SL may be less direct measures of definiteness, the counselor asked the student whether he felt any inconsistency in these results. The student replied negatively, with a mild attack on the validity of the test. He returned later, however, to concede that he did experience some ambiguity in his vocational clarity and asked for a series of three counseling interviews to discuss his vocational plans. This series was later extended. In the course of counseling he came to a clearer understanding of the various motives he had for entering and not entering the ministry. He found himself able to accept both, and decided tentatively on a specialized form of the ministry which seemed to offer optimal satisfaction of the various motives.

6. Privately examining TSI results, the administrator noticed a zero A (Acceptance by others) score, also that the answer to item 34 was critical of parents and that on items 52 and 53, the student also denied parental influence. He was also interested to note that the student was among those who misread instructions to questions 13 and 16 and imply, by filling in an age, that parents are dead, when other replies report that they are living.

Suspecting that few students actually owe no motivation for the ministry to their family and friends, especially first-borns, as item 24 showed this student to be, he hypothesized that the zero A score might be the consequence of a defensive denial of dependence and a rebellious assertion of his own independence. He noted that the high R (Social Reform) score seemed consistent with this hunch. He made a mental note to speak to the student's faculty advisor at the next opportunity. He asked the advisor how the student responded to curriculum and registration requirements. The advisor was startled at the administrator's "perspicacity" and reported that the student had come into the registration interview with a complete program of studies (the curriculum of the school allowed students much choice) and had not been open to any suggestions of change. The administrator shared the basis of his hunch and predicted that class assignments and other instances of encounter with authority might prove difficult. He suggested that they might be ready to recommend psychological testing and counseling referral if his effectiveness became too much impaired. This was not done, at least not during his first year in seminary. Helped by the "tip-off", the advisor undertook a mildly supportive, rather than a stern judgmental role, during two minor deadline crises during the year. He now feels hopeful that the student will "grow out" of this constricted, rebellious phase.

7. The counselor reviewed a pattern of scores with the student: High D (Definiteness), associated on items 42-44 with early and definite decision, but low NL (Natural Leading) and SL (Special Leading); high I (Intellectual concern) and R (Social Reform), low on other AIFLERP scores, especially P (Service to Persons). Reviewing the items on these scales with the student, he suggested that it hardly indicated a pattern of interests most consistent with the parish ministry. He further added the information that this pattern is sometimes found with students who have made an early decision for the ministry but whose pattern of interests has changed, bearing little affinity for traditional ministerial interests. In the discussion, he added that in this school, students who dropped out sometimes had scores such as this.

These remarks struck a responsive acknowledgement. The student began exploring his vocational planning, in what proved to be the beginning of counseling. He acknowledged disinterest and dislike of most functions of the parish minister. His first inclination was to retain some form of his commitment to a religious vocation by teaching religion, represented by the high I. Forced to explicit consideration of this possibility, he came to feel that his apparent abilities would not support this decision and that his largely extraverted personality might be restive under scholarly discipline. Further examination of reservations about the parish led him to a growing feeling of need and opportunity. The deficiencies of the parish, against which he reacted, came to appear as opportunities of creative development. Within this context, he came to experience a vigorous and enthusiastic attraction or "call" to the parish ministry.

3. BACKGROUND OF THE INSTRUMENT

Sponsorship:

A decade of research has gone into the development of the Theological School Inventory, from the first plans for research to the publication of the first full edition of the manual. After preliminary discussions and at the request of the Department of the Ministry of the National Council of Churches, the Educational Testing Service in September 1954 issued a proposal for a three-year research project. The goal was to develop a psychological instrument which would provide guidance for individuals who are considering the ministry as a profession, and provide improved means of selecting and counseling theological students. The proposal was submitted to the Lilly Endowment, Inc. which agreed to support the initial project, and has continued its support through succeeding stages of the instrument's development.¹

As initial development ended and the TSI neared readiness for general use, the Ministry Studies Board was formed in 1960 to supervise its distribution and use and to continue study on the instrument. The Lilly Endowment has continued to support the initial work of the Board. The Board's trustees represent, in equal numbers, the Department of the Ministry of the National Council of Churches, and the American Association of Theological Schools; additional members are elected at large. Publication of this manual completes the transition of responsibility for the TSI from the Educational Testing Service to the Ministry Studies Board. ETS has generously released to the Board its rights in the TSI while continuing to act in an advisory capacity.

Although the Theological School Inventory represents a specialized and even unique contribution to the church's ever-present problem of recruiting and guiding its professional leadership, it is by no means a new or isolated endeavor. Assistance in its development has come from many sources. Ever since the stages of early planning, the project has drawn heavily upon the resources of the Department of the Ministry of the National Council of Churches, the American Association of Theological Schools, and scores of persons active in the area of research from various denominations and seminaries.

Preliminary study of the ministry:

Initial work of the Ministry Study comprised an exploratory but comprehensive and penetrating empirical analysis of the work of the parish minister. This was based on questionnaire responses from large samples of ministers and laymen and on lengthy interviews with smaller samples. Reports of parts of this phase of the study, somewhat incidental to the development of the TSI, include:

Kling, F. R. A study of testing as related to the ministry. Religious Education, 1958, 53, pp. 423-248.

Kling, F. R. Value structures and the minister's purpose. In Oates, W. E., The minister's own mental health. Great Neck: Channel Press, 1961. Pp. 51-64.

Kling, F. R. Roles of the parish minister. Paper read to the 1959 annual meeting of the Scientific Study of Religion.

These are available in mimeographed form from the author.

¹ The Ministry Study of Educational Testing Service was formally begun in July 1956. David R. Saunders was the initial director, succeeded for the remainder of the Study's first year by Sam C. Webb. Frederick R. Kling became director in July 1957.

Other parts of this research remain to be published. Some of the instruments developed for this study are now being used in research carried on by other persons, some of it under the auspices of the Ministry Studies Board.

Development of TSI scales:

Part of a questionnaire which was submitted to a sample of ministers asked open-ended questions about their personal experiences in deciding to enter the ministry. The two questions to which ministers responded were the following:

1. Please describe your own decision to enter the ministry, as you experienced it at the time. Indicate what you thought about the "call" at the time and why you felt you should be a minister.
2. Please give your present evaluation of this experience. Point out any changes that have occurred in your thinking about the call or in your understanding of your own motivation in entering the ministry.

The questionnaire was sent to about 800 ministers from eight representative denominations -- Assembly of God, American Baptist, Southern Baptist, United Lutheran, Lutheran Church Missouri Synod, Methodist, Presbyterian U.S., and Presbyterian, U.S.A. Although the entire questionnaire required several hours, returns were received from about 500 ministers. (One minister reported spending 19 hours completing the form!)

These statements by the ministers were studied to discover the prominent different types of motivation stated or implied by them; once the types were identified, it was found that the ministers' statements could be reliably sorted into these categories. The categories yielded by this content analysis are discussed in a major report ("The motivations of ministerial candidates" by Frederick R. Kling, Research Bulletin 59-2, published by ETS in February 1959, and available, without charge, from the Ministry Studies Board) and became the initial scales of Form A of the Theological School Inventory. These were the first versions of the NL, SL, CC, and AIFLERP scales, plus the two "lost" scales discussed in Appendix V. The items were adapted from the statements which the ministers had prepared.

Form A also included several other intended scales thought to be of importance in assessing ministerial candidates and also attempted to measure the relevant "knowledge" on religious topics which a candidate had. The only one of these to survive further empirical screening and refinement is the Flexibility scale.

Revision of TSI:

Form A was administered in the fall of 1958 to the entering classes of 21 representative seminaries. Correlational and factor analysis confirmed the NL, SL, CC, AIFLERP, and FL scales as internally reliable and as adequately distinguishable from other scales. Other intended scales did not pass this test. Further statistical and content analysis suggested revision of wording of some items, in order more adequately to balance the "social desirability" of forced choice items, to reduce ambiguity, etc. More changes were made on the NL and SL scales than on the others, part of which are explained in the description of these two scales below. A few new items were written, most notably an additional item for each of the AIFLERP scales; these later proved to be reliably a part of their intended scales.

Form B, incorporating these changes, was administered to the entering classes of 28 different seminaries in 1959, 1960, and 1961. Factor analysis of the results (1) confirmed the reliability of the CC and AIFLERP scales as written, (2) suggested the elimination of some of the intended

items from the NL, SL, and FL scales, and (3) generated a new scale--the Definiteness scale--mostly from items intended for the NL and SL scales. All of these revisions were made before students' answer sheets were scored; scores reported from the 1959 administration and used in some of the follow-up studies reported below were obtained from Form B, after the scales had been revised on the basis of initial analysis of results on Form B. That is, the TSI scores reported for 1959, 1960, and 1961 administrations may actually be regarded as Form C scores obtained from the instrument as printed for Form B.

Form C as scored retains exactly the same scales, items, and wordings as the revised and scored Form B, although they appear in a slightly different context. The printed booklet for Form C eliminates some of the items (found to be unreliable and unscored) which appeared in the Form B booklet, adds a few items (which are unscored but which may conceivably be added in a future revision), and asks for slightly different information in Section I. The change of context caused by the change in these various items mingled with the scaled and scored items may conceivably affect the meaning and interpretation of the obtained scores; follow-up studies reported in this manual and based on the revised Form B scoring need to be replicated with Form C. But it is not believed that the relatively minor change of a few context items surrounding the scale items can seriously affect the empirical findings so far reported. The reader is reminded that the major validity of the TSI relies on the face validity of these open and undisguised items.

Form C was released for general use in seminaries in the fall of 1962 and was administered then to the entering classes of 67 seminaries, almost all of whom have cooperated in supplying data which has become the basis for the norms reported in the Appendix II.

4. DESCRIPTION OF SCALES

Section II (D, NL, SL, CC, FL):

The first three scales in Section II may be regarded as supplying indices of the strength of motivation for the ministry. All the scales in this section are developed independently; i.e., each item contributes to only one scale, and an answer to one item is not forced by the answer to another.

All the scores in this section are on absolute scales, and it is meaningful to compare students with different scores on the same scale. The scores range around a neutral point of 50, which is the score achieved when a student answers half the items of the scale in one direction and half in the other direction. The actual average scores for NL (Natural Leading), SL (Special Leading), and CC (Call Concept) are virtually 50, considering a broad sample of many types of schools. (The average D (Definiteness) and FL (Flexibility) scores are well above 50.) However, in considering whether a particular student's score is "high" or "low", it is important to compare him with the average for his own school, denomination, or other reference group, which may differ considerably from 50.

Each item consists of a stem and alternative response choices. The student's answer ranges, on a four-point scale, from strong agreement with one choice to strong agreement with the other.

Beyond providing two possible estimates of the general strength of motivation, the NL (Natural Leading) and SL (Special Leading) scales, along with CC (Call Concept), provide an indication of how a student has come to terms with the question of the degree to which his motivation is immediately and transcendently God-given and the degree to which it is naturally and experientially mediated. FL (Flexibility) does not directly refer to motivation but attempts to measure a personality characteristic that may be important in interpreting other scores and in counseling a student.

Section IV (AIFLERP):

These scales measure seven categories or components of motivation. The scores are relative to one another. The motivation, whose general strength is estimated in Section II, may be regarded as distributed among the seven components in this section. Scores, which may range from 0 to 24 on each scale, are derived from a modified paired comparison or "forced choice" procedure in which the student is repeatedly asked to indicate which of three components is relatively more important for him. The actual average--over a broad sample of schools--is close to the midpoint of 12 for all scales except A, which averages well below 12, and E and P, which are somewhat above 12.

The scores on the seven scales should total 84 points for each student; he simply indicates how he distributes these 84 points among the seven categories.

Because of this "ipsative" or comparative form of the section, it is not meaningful to compare one student with another on a single scale. (A student who scores 20 on P (Service to Persons), for example, does not necessarily have a stronger motive for service than a student who scores 10. The higher score simply indicates that for that particular student, service to persons stands out especially strongly among the seven possible categories of motivation. The higher P score can as easily mean that one or more of the other six categories (AIFLER) are weaker for that student.) Scores on different scales can be compared, for the same student. Profiles of different students can be meaningfully compared.

In considering the specific discussion of each scale below, the reader should refer to the list

of items for each scale, as given in Appendix I, which is also published separately.

Definiteness (D):

Range: 38-62

¹General mean: 55.5

Standard deviation: 5.4

¹Local mean:

Standard deviation:

Students enter seminary with varying degrees of conscious certainty concerning their plans to be a minister, as compared with the possibility of entering another vocation. Some enter seminary on a frankly trial basis, hoping their experiences will make clear whether they belong in the ministry or in some other vocation: These students will have low scores on D. Others enter seminary with all or virtually all indecision resolved and with definite, unswerving intention to complete seminary and enter the ministry: These will have high scores on D. It should be obvious that high and low scorers on D will be responding to seminary experiences in very different ways, will perhaps have difficulty in communicating with each other and in feeling part of the same community, and will, if they seek vocational counseling, be raising very different kinds of questions.

"Deeper" interpretations: "real" or "apparent" definiteness. Especially on the D scale, counselors, and perhaps students seeking counsel, should be reminded that TSI results are based on conscious self-report. In some cases, counselor or student may wish to inquire more deeply into the basis for the self-report of high or low definiteness. A high score may result either from a blind or from a thoughtful certainty. Because almost all entering students may be assumed to experience some indecision which can be expressed on one of the six items of this scale, a counselor may be suspicious of a very high score (of 60 or above) as possibly defensive or denying. (A score of 62 would indicate that the student has given a maximum "double-sure" affirmation to every statement of definiteness.)

It is also possible that a low D score may indicate rather than a greater supply of vocational doubts, a greater self-consciousness and sensitivity to whatever uncertainties may exist. A low D score tends to be associated with intellectual (I) motivations for the ministry and with personal flexibility (FL), also with low evangelistic motivations (E) (Appendix IV). D scores tend to be lower in more "liberal" schools and individuals (Appendix II). As seen in the factor analysis reported in RB # 2, the D scale tends to load more highly on the "conservative-liberal" factor than on the "strength of motivation" factor. With the perilous assumption that "liberal" factors may imply greater self-reflective and analytic tendencies, these correlations may suggest that a low D score reflects greater sensitivity to uncertainty at least as much as it reflects the presence of uncertainty itself.

However, at the conscious level and for most practical purposes, the D is still a meaningful score. Definiteness of intention is real and important, whether it is the result of long, laborious self-analysis, or whether it results from an unwillingness to get bogged down in a review of reservations and uncertainties. Only in individual cases may it be important for student or counselor, on the basis of other test results or other experiences of the student, to explore the degree of self-critical analysis that may be involved in the high or low D score.

Comparing other TSI measures of definiteness. In interpreting the D scale, the score should be compared with two other indications of definiteness on the TSI, one even more direct, one more subtle. Item 42 in Section I asks the student to indicate degree of definiteness

¹ General means and standard deviations are given for male theological students, except for those over 30 who are changing from a non-church vocation. These are based on 1775 students entering 53 Protestant seminaries in 1962. Appendix II gives norms for each school separately, and for women and for older men changing occupations.

On the line left for "local mean"--and also in Appendix II--the test user is invited to enter for his reference, the means and deviations resulting from testing in his own school, or other particular sample.

on a three-point scale. Correlation between item 42 and the D score has been found to be about .73 (TSI Research Bulletin # 3, Table II). Any great discrepancies should raise the possibility of a special interpretation of the D score. The NL (Natural Leading) and SL (Special Leading) scores provide a possible, less direct estimate of definiteness of motivation. Each correlates significantly, though not highly (about .35), with D (Appendix IV). If a student scores high on D, but does not use either the NL or SL scales to indicate a positive basis for this calling, some question may be raised about the meaning of the high D score; it may conceivably be based on some other understanding of the calling than either NL or SL items provide, or it may tend to be a stubborn and "blind" assertion of definiteness. Similarly, a low D score should raise a question about special interpretation if accompanied by a high NL and/or SL score.

Validity data support this face understanding of the Definiteness scale.¹ Some correlations indicate that the student who expresses definiteness on the D scale concerning his vocation also tends to be positive and readily committed on other matters. He is not only more likely to be married (RB 1:1; RB 3:11), but married at an earlier age (RB 1:2)! He tends to affirm more than the low D scorer that his emotional adjustment is good (RB 3:18); this latter correlation may be most simply interpreted as part of the trait of making positive (and socially desirable?) assertions about himself; however, it may also be true that the high D scorer tends to "overlook" difficulties and that the low D scorer actually does experience more emotional turmoil as cause or as consequence of his indecision.

Many correlations represent high D's greater readiness to be involved in the ministry. He expresses stronger interest in the parish ministry as he enters seminary (RB 1:1, RB 3:12). D is more strongly related with this expression of interest than any of the other "conservative" scores (see pp. 48 of Section 8 and RB 3:19) suggesting that this interest is related specifically to the D scale, as well as to the "conservative" factor to which D is partly related. He is likely to have had previous professional parish experience (RB 1:1, RB 3:13). He also is more likely to obtain field work during seminary as a minister and to find placement after seminary in parish or other pastoral work, rather than in religious or non-religious work more remotely related to the parish ministry (RB 3:2,3). He is somewhat less likely to drop out of seminary, although this appears to vary according to school (RB 3:1). The high D scorer is more inclined to report that he has been influenced in his decision by ministers (as compared with family, friends, or teachers) (RB 3:13), and rates well the religious instruction in his home church (RB 3:13). He expresses confidence about meeting the demands of administrative work and of serving as a personal example (RB 3:14), two aspects of the ministry which often give prospective candidates great pause; administrative work is the only one of the ten "demands" listed in Section III about which all entering theological students express more discomfort than comfort, on the average (see Appendix II). D shares with other "conservative" scales a correlation with comfort over making personal sacrifices and working with persons with restricted intellectual interests (RB 3:14).

¹ The discussion of each scale in Sections 4 (description) and 8 (interpretations) of this manual will include a summary of relevant data that have been developed in research studies so far undertaken with the TSI. Most of these data are reported in a series of Theological School Inventory Research Bulletins which are supplied as a supplement to this manual and which should be consulted for a more adequate evaluation of the data here summarized. Note especially that the correlations from which trends are reported in this manual are consistently small. But see also "notes on correlations" which appear in the "Results" section of Research Bulletin # 3, in which it is explained that all statistically significant correlations obtained in these studies are reported, not just a selection of those most convenient to proffered interpretations.

References to the Research Bulletins will be in the following form: RB 3:12; RB 4:5,7 indicate references respectively to Research Bulletin # 3, Table 12, and Research Bulletin # 4, Tables 5 and 7. Correspondingly, tables in the Research Bulletins include reference to pages in the manual on which relevant discussion appears. Reference in the manual to other sources of data will be by conventional bibliographic reference.

Changes in D score during the three years of theological education are correlated with other variables in an expected pattern. The student who earns good faculty ratings on all counts, and also good ratings of his field work performance, tends to increase D during seminary (RB 4:7, 8) presumably as a result of his successful involvement in seminary life. This, in part, reflects faculty favoritism of the more malleable student who enters with low D score (RB 3:6). But the positive relation between faculty ratings and changes in D score (RB 4:8) is much stronger than the negative relation between faculty judgment and initial D score (RB 3:6). Change in D score is negatively correlated with drop-out from seminary; the student who loses D does drop out (RB 4:11). The student who increases D tends to express confidence on leaving seminary about meeting the demands of "dynamic leadership" (RB 4:11), another one of the demands entering students tend to feel less comfortable about.

The correlations reported with the D scale also generally hold with the single item (# 42) asking the student to report the definiteness of his decision. However, the correlations are consistently smaller in magnitude, as would be expected from the smaller reliability of the single item.

Natural Leading (NL):

Range: 32-68

General mean: 50.2

Local mean:

Standard deviation: 6.9

Standard deviation:

A more appropriate and literal label for this scale might be "naturalness in the role", rather than natural leading. A student scoring high on the NL scale is reporting--taking the items at most immediate and direct face value--that he feels comfortable and confident about the prospect of assuming a minister's role, especially the more obvious aspects of the role, such as public leadership and public speaking. He feels qualified by his own abilities and talents and feels easy and natural about assuming the mantle and duties of the minister, as he contemplates or has experienced them. A student scoring low on the NL scale is reporting some reservations about his own personal suitability for the minister's role, and it for him, reservations based primarily on his assessment of his own capabilities and talents.

Interpreting a "call" through talents and confidence-building experience. On none of the items of the NL scale is the student invited directly to associate the reported feeling of naturalness in the role with his own motivation for the ministry or with a divine "call". However, it is believed by the developers of the test that the NL scale does measure the degree of motivation for the ministry which the student attributes to such "natural" processes as the discovery that his own abilities appear to match the needs and demands of the profession. This may be distinguished--as will be discussed below--from motivation to be attributed to immediate, divine, transcendent "calling" without regard for rational assessment of natural experiences (assessed by the SL (Special Leading) scale). It is assumed that most students who attribute their motivation to this process of "natural leading" do so in the context of a theological position in which they attribute divine initiative or revelation to these natural processes. God is seen to be acting through the natural processes.

The items on the NL scale were derived from statements made by ministers when they were asked to discuss their motivation for the ministry. In these statements, the ministers did explicitly attribute motivation and sense of call to such experiences of discovering their own apparent suitability and naturalness in the role. In these statements, the ministers also frequently contrasted this basis of motivation with a "special leading" experience. A characteristic statement was "I did not have any sudden experience of assurance...but I did feel a gradual awareness of the meeting of my interests and skills and the obvious need of the church." In these statements, a content analysis suggested that statements such as appear on the present NL scale tended to be associated with a larger pattern of perspectives, which may be summarized by the third column of Table I which is taken from "The Motivations of Ministerial Candidates" by Kling.

This association of NL scores with patterns of attributed motivation has been reported on the basis

of informal interviews with students about their scores. But there has been no systematic confirmation established that students scoring high on the NL scale do tend to regard this "naturalness in the role" as a genuine (and acceptable) basis of their motivation for the ministry.

Table I: PATTERNS OF SPECIAL AND NATURAL LEADING

<u>Indicant</u>	<u>Special Leading</u>	<u>Natural Leading</u>
1. Conception of life purpose	Obedying God	Being a true person
2. Nature of the "call"	An inner prompting	Response to a need
3. Interpretation of external events	Signs from God	Stimuli to thinking
4. Image of the ministry	A unique vocation	One of many vocations
5. Personal Assessment	An instrument of God	Qualified for the ministry
6. Recourse for guidance	Prayer	Counsel
7. Reaching a decision	Surrender	Rational judgment

Kling has explained (in a 1962 memorandum privately circulated) that the attribution of motivation was deliberately taken out of the NL items--with the assumption that it could still be assumed in the student choosing an NL item, even though absent from the item--for the sake of avoiding a different kind of bias. Early pre-testing of items suggested that students feeling special leading would tend to deny any natural leading rather than run the risk of being misunderstood as having only natural leading. To preserve the felt priority of their special leading, they would deny NL items because each, read alone, tended to imply that this was the basis for the motivation for the ministry. To accommodate these items to these students and to take the threat from them, the attribution of motivation was taken from them. This was intended to allow them to express whatever degree of natural leading they did feel, without seeming to threaten their report of special leading. The items now, in effect, read: "I feel comfortable in the ministry." And it is assumed by Kling that the student means to add "...and that is a reason for choosing the ministry." But by not forcing SL to add this explicitly, the revised items do not drive him away from saying it at all.

In the supporting data relevant to the above description of the NL scale, most impressive, perhaps, are the correlations between the NL scale and Section III items, which ask the student to record the degree of comfort he feels in meeting ten different demands of the ministry (RB 3:14). The format and instructions for Section III suggest to the student that he is expected to balance his answers, expressing comfort over some demands, discomfort over others, and students almost invariably so distribute their answers. Yet the NL scale is positively correlated with expression of comfort over all ten demands. It is the only TSI scale to show such consistent positive relation with all the Section III items. The correlations are largest, and significant, with the more personal expressions of confidence in oneself (making personal sacrifices, serving as a personal example, working with people) and with the more public roles (dynamic leadership and public speaking); the last two items are, of course, actually scored in the NL scale.

Other correlations, similar to those with the D scale, suggest the strong NL scorer's confidence about himself and his decision for the ministry. NL is correlated with D (Appendix IV), the direct statement of definiteness (RB 3:11), with self-ratings of physical and emotional health (RB 3:18). NL is correlated negatively with the age of final decision for the ministry; i.e., the strong NL scorer decided definitely earlier (RB 1:1; RB 3:13)

The correlations with variables indicating the student's perseverance into the ministry are in the

expected direction, but much less strong than with variables indicating his self-confidence at the time of entering seminary. (This possible discrepancy will be considered further in discussing "interpretations" of NL in Section 8.) NL tends to be correlated with ratings of field work and seminary performance (RB 3:5,6), with remaining in seminary and not dropping out (RB 3:1), and with choosing a pastoral position after seminary (RB 3:2,3).

Several correlations indicate that the NL score is associated with relatively close involvement with church life, which presumably has provided a basis for NL's confidence. The NL scorer tends to rate his home and church religious training as good (RB 1:1, RB 3:13), to say that he has been influenced in his decision by ministers (RB 3:13), and to have close friends entering the ministry (RB 1:1). He is likely to have had some professional experience in a parish (RB 1:1, RB 3:13).

Relevant to the interpretation of confidence in the role as a basis for the call, there are some correlations suggesting that NL may be a more likely score of a "liberal" student and that he may therefore be more inclined to intend his NL-confidence to represent a form of call. NL shares many of the correlations of the "liberal" factor (cf. RB 3:19) but does not show up clearly so on a factor analysis (RB 2:2) because NL is also related with definiteness of commitment, which is a prime mark of the "conservative" factor. NL is correlated with the rated liberalness of the student's home church (RB 3:18), with the L score (the definer of the liberal pole of factor 1 in Table IV-3), with size of town (RB 3:11), with few students being recruited into the ministry by the home church (RB 3:18), and with evidence of a background of intellectual interests: NL is correlated with reported influence of teachers on the decision for the ministry (RB 3:13), and with having a father who is a teacher (RB 3:16). However, as will be further considered in the interpretations section, the strongly NL student does not persist in his interest in intellectual matters; his confidence is in himself as a pastor, not, eg., as a teacher.

Does NL predict effective or ineffective ministry?

As with other scales, individual counselors or students may feel intuitive value judgments as to whether a particular score on the NL scale is desirable or undesirable. The developers of the test find it impossible to derive, either empirically or a priori, such a judgment. (Cf. pages 14-18 of the manual.) It is extremely difficult to judge--and there are no available data--as to whether, or in what situations, a minister who feels easy and natural in his role is more or less effective than one who feels torment and difficulty in assuming it. Who is to choose between the brash young Peter and the introspective Paul? A list of the effective leaders in the church's history would show a large proportion of tormented Jeremiahs. But so might also a roster of the most ineffective would-be leaders. There is some evidence that in the contemporary church those who find positions of prominence are those who might score high on NL.

Special Leading (SL):

Range: 28-72

General mean: 49.4

Local mean:

Standard deviation: 8.7

Standard deviation:

The SL scale--like the CC (Call Concept) scale--focuses clearly and explicitly on the question of whether the student regards a direct, immediate, communication and intervention by God as dominant in the motivation for the ministry. The high SL scorer is reporting, in the language of a typical item, that he has "answered a call more compelling than any rational personal assessment." The decision to enter the ministry is different from any other decision, and is a direct, specific, and immediate response by the student to his experience of a direct, specific, and immediate call by God. Deliberation, reflection, self-appraisal, consideration of needs--all of these may or may not be involved, but certainly they are not dominant. Supreme is God's compelling intervention.

¹ Ham, H. M. Personality correlates of ministerial success. Iliff Review (Winter) 1960, pp. 3-9.

The "low" SL scorer is reporting that the natural decision-making processes are more dominant: consultation with others, self-reflection on interests, abilities, personal preferences. If the direct summons of God has been experienced, it has been subordinated and has been tested by the usual human decision-making processes.¹

The SL scale--like CC--is definitely a "double-ended" scale. A "low" score is not just a denial of positively scored items, but is clearly an affirmation of a positive alternative. A "low" SL score is affirming that processes of "natural leading" have been more dominant. This scale has the greatest variability of any on the TSI, with the CC, as would be expected, showing almost as much variability (see Appendix II).

The SL scale--like CC--is obviously representative of a "conservative" religious view. A higher SL score is much more likely among older students, among Southern schools, and among denominations and seminaries that would accept the term "conservative" (see Appendix II). In factor analysis (RB 2:2), SL and CC are not loaded significantly on any other factor than the "conservative-liberal" factor, which also includes E (Evangelistic witness) and F (Self-fulfillment) scales of the TSI. SL scores tend to decrease during three years of seminary, especially among extreme scorers, suggesting that seminaries may have a "liberalizing or moderating effect" (RB 4:2). (See the first "interpretation" at the beginning of Section 8 for more discussion of SL and this "conservative" factor.)

SL as a measure of strength of motive. The symmetry of the scale breaks down at one point--when the scale may be used as an estimate of strength of motivation. A high SL score may be regarded as representing a strong and firm motivation, but the same inference may not be made from an extremely low SL score. The nature of the SL call is such that to respond at all is to respond unequivocally and without reservation. A call which is acknowledged as clearly SL in character is thereby a strong motivation. But a call which is clearly "natural" is in nature (low SL score) is thereby open to prolonged consideration and may or may not have reached a point of definite and strong conviction. It may be expected that among those who regard special leading as normative (high CC score), SL ought to be highly correlated with D and with other evidence of a sustaining motivation. But the converse prediction is not so likely, that among those who regard natural leading as normative (low CC score) SL would be negatively correlated with D. (This particular prediction has not yet been tested statistically; over all subjects, SL is positively correlated with D, to a slight degree, at about .30.)

The SL score is significantly correlated with the tendency of the seminary graduate to choose a position in a parish church, and not in non-pastoral or non-religious work (RB 3:2,3), although this varies by school. The relation with post-seminary placement is the strongest of any TSI scale, except D. SL is most strongly correlated (RB 3:4) of any TSI scale with the tendency of the student to choose field work assignments in a parish church. SL shares with the other "conservative" scales (RB 3:19) a relation with the student's initial expression on entering seminary, of interest in the parish ministry (RB 1:1, RB 3:12). SL is correlated with the D scale (see Appendix IV) and with the direct expression of definiteness of commitment (RB 3:11).

It was stated above that the student understands his call to be SL or non-SL in character without regard to his sense of comfort in the role of the minister. Either high or low SL-scorers may have an abundance or a dearth of experience and confidence in assuming the role. The question on the SL scale is the degree to which a sense of calling and motivation is attributed to such experience. Relevant to this, it is interesting to note that SL has virtually zero correlation with the NL scale (see Appendix IV) and with all of the items in Section III of the TSI (RB 3:14). Correlations range from -.10 (scholarly interests) to +.11 (personal sacrifices), but seven of the 10 correlations do not exceed .05 in magnitude. It is the only TSI scale to have no statistically significant correlations with any Section III item.

¹ Among the types of call delineated by H. R. Niebuhr (The purpose of the Church and its ministry. New York: Harper, 1956. P. 64.) a high SL score may be associated with the "secret call" and a low SL score with the "providential" call.

Concept of the Call (CC):

Range: 30-70

General mean: 49.9

Local mean:

Standard deviation: 7.9

Standard deviation:

The CC scale considers the same distinction as the SL (Special Leading) scale, the distinction between a call "of an unusual, mystical, and supernatural kind of experience that separates a person to God's work", and a call "of a very natural experience, similar to what prompts a person to go into any vocation"--to use the language of a characteristic item. However, whereas the SL scale asks a student to report on what kind of motivational experience he himself has had, the CC scale asks for his opinion as to what is the proper type of call for a ministerial student. How does God actually call men into the ministry? What kind of experience can a man trust as definitively a call? These are the questions asked by the CC scale, as compared with the question on the SL scale: what kind of call have you experienced?

The CC scale is highly correlated with SL (about .65; see Appendix IV); most commonly a student's score on the two will coincide closely. A sizable discrepancy ought to be regarded as a sign of some kind of inner tension: the student is not able to report that his own experience coincides with what he regards as normative. It would seem worthwhile for him to explore further the bases for his perception of his own experience, or for his perception of the necessary ways of God, or for both. See Section 8 for further discussion of such discrepancy.

Flexibility (FL):

Range: 32-68

General mean: 53.2

Local mean:

Standard deviation: 7.2

Standard deviation:

Consistent with the trait it purports to measure, this scale violates the otherwise consistent nature and purpose of the TSI. It does not measure any aspect of the student's motivation for the ministry. It does measure his flexibility, particularly with regard to the working of his mind, his beliefs and attitudes. Items on the scale are similar to those on scales used to measure "intolerance of ambiguity", "dogmatism", "rigidity", preference for structure, and their opposites. A high score on the scale represents what is sometimes called simply "liberalism", openness to doubt, ambiguity, change. Items do not reflect a liberal or conservative "content" to belief, but only the "mood" or "style" of admitting or welcoming flux and complexity. Items refer mostly to general intellectual preferences, rather than specifically to theological method.

A glance at Appendix II will show the FL score correlated with the "liberalism" of a school, as this is generally regarded. FL is negatively correlated with CC and SL (see Appendix IV), the scales measuring a theologically "conservative" attitude toward the "call", and is loaded on the "liberal" end of Factor 1 in RB 2:2. A low FL score seems particularly characteristic of the older man changing vocation to enter seminary (see Section 8, Appendix II, and RB 3:19).

FLexibility is correlated negatively with the Definiteness scale (see Appendix IV) and with the direct statement of definiteness of commitment (RB 3:11). But apparently FL is distinguishable from the negative of D, since the correlation is only about -.25. It is possible for a student to be definite concerning his general commitment to the ministry, but still flexible and undogmatic in approach toward issues in the ministry and in theology.

Some other correlations support the scales of flexibility. FL scores are correlated negatively with the liking of courses in the structure of society, and in natural science and math, where there is also emphasis on definite structure (RB 3:15). FL shares with I a strong correlation with listing physical education among best liked courses (RB 3:15). This conceivably could represent enjoyment in breaking the structured patterns of classroom; it is not inconceivable that it results from a flippant attitude while taking the TSI. But see also the interpretation of I that is offered in the discussion in

Section 8, (which has the stronger correlation with this item) that gym and field may afford safe expression of otherwise troubling motives.

It may also illustrate the high FL-scorer's flexibility that at schools such as Colgate Rochester and Drew (where he may find less pressure to enter the parish than at some other schools) he is more likely to take a full-time parish internship (RB 3:8) and that at Southern Baptist he is more likely to take clinical training (RB 3:9).

FL is correlated negatively with the student's likelihood of entering the parish (RB 3:3,4). This could be interpreted as direct evidence of his "flexibility", that he can deviate from the standard pattern by graduating from seminary without entering the parish, or any religious work. However, the more adequate interpretation is probably that offered in Section 8: the general open, searching, restless attitude represented by FL may feel the parish ministry too restricting and uncongenial. This interpretation emphasizes the difficulty the high FL scorer has in accommodating himself to the parish ministry in particular--rather than a more general vocational restlessness--and makes the FL scale relevant, after all, to understanding the student's motivation for the ministry.

Desirable capacity for growth? Unlike any other scale on the TSI, the developers of the test do intend a value judgment with regard to the FL scale. Their assumption is that it is more desirable to possess the freedom to enter new situations, to be comfortable in situations of doubt and ambiguity and creatively responsive to them, to be sensitive and tolerant of the positions of others. They assume this represents a greater capacity for growth and maturation in general and for benefit from theological education in particular. This value judgment is apparently shared by seminary faculties. Interviewer ratings of "capacity for growth" are correlated more highly with the FL scale than with any other scale, although the relationship with this rating of doubtful reliability is not great (RB 2:10). Faculty ratings of involvement and of potential effectiveness and seminary grades are also correlated positively with FL scores (RB 3:6).

Social desirability bias. Because this value judgment in these items may also be apparent to students taking the test, this scale is susceptible to the student's wish to make himself appear acceptable. (Probably D is the only other scale so susceptible). A high score on this scale may represent a "truly" high personal flexibility or it may represent the student's acknowledgement that high flexibility is a desirable characteristic and that he wishes to make himself appear to have it. Whether he makes himself appear high on D or on FL may measure his perception of the norms and expectations of his seminary or denomination. On all other scales of the Theological School Inventory, controls are exerted against this biasing influence of social desirability; thus special caution is in order in connection with the flexibility scale.

However, perhaps mitigating this concern, the FL scale has not been found correlated with the social desirability scale of the MMPI and is negatively correlated with the K and F scales (RB 5:1).

Acceptance by others (A):

Range: 0-24

General mean: 8.5

Local mean:

Standard deviation: 5.2

Standard deviation:

The A scale measures the degree to which the approval, encouragement, influence and support of other persons, especially the student's family, is specifically identified as a factor in the motivation and decision for the ministry.

The items on this scale are homogeneous in content and highly intercorrelated (see Appendix III). They refer explicitly to the direct influence of others, and specifically to earlier influences, such as among family and friends in the home church of the student. Experimental items which have attempted to extend the statement of influence have not been well correlated with these basic items. For example, "A sense of love and affinity for fellow Christians led me to realize that the ministry

was where I belonged," was correlated at approximately zero with items on the scale. "I pictured the minister as a pastor, loved by his people, and sharing in their church and family activities," correlated about .13 with the scale items.

Correlational data emphasize that the A score particularly records the influence of the family. The score is correlated strongly with the directly reported influence of family; less so, although still substantially, with the reported influence of friends; but it is correlated slightly negatively with the directly reported influence of ministers (RB 3:13).¹ The score is correlated with the degree of church activity of father and of mother (RB 1:1; RB 3:13), with whether parents are college graduates (RB 3:11) (implying their stronger endorsement of advanced professional training), with whether the father is in a church vocation (RB 3:13), with reported quality of home religious training (RB 3:18), (but not with reported quality of church religious training) (RB 1:1; RB 3:13).

The negative correlation with age of decision and with whether the student has had previous parish or other vocational experience further emphasizes that the influence acknowledged on the A scale is early in the student's life (RB 1:1; RB 3:13).

It should be especially emphasized that the A score represents the degree to which a student acknowledges parental and other influences in a specific vocational decision, not the degree to which he may actually have been led by such influences in his vocational decision, nor the degree to which he may be more generally a "dependent" personality and be motivated generally by "needs for approval". The interpretation of the score needs to keep in clear focus that it is the report of influence as a motivation for the ministry which is to be interpreted, not necessarily a susceptibility to influence.²

Intellectual Concern (I):

Range: 0-24

General mean: 11.9

Local mean:

Standard deviation: 5.2

Standard deviation:

This scale measures the degree to which the student has been brought to theological education by a particular concern to pursue theological and related intellectual questions. "Opportunities for continued study and intellectual growth...interest in theological issues...to explore them more deeply...to relate the insights of Christian thinking to our understanding of other fields of knowledge"--these are the key phrases of motivation which the student claims when he scores high on this scale.³ He wants to study theology, and the obvious place for this is theological school, possibly to be continued afterwards in the ministry.

This is a highly identifiable and distinct motive for beginning theological education, readily distinguishable from those suggested by the other AIFLERP scales,--a characteristic, perhaps the

¹ It is positively correlated with reported influence of teachers only in schools (Yale and Colgate Rochester among those studies) in which students have substantial professional interest in teaching.

² It is possible that the low correlation between TSI score and interviewer rating on the A scale (RB 2:1) may be traced to the unfortunate inclusion in the definition of A given to raters of an emphasis on the more general "need for approval". The first phrase of the definition read: "A need to feel that others approve." Interviewers less familiar with the test may have understood this phrase in a larger context than that of the motivation for the ministry. Their rating may have reflected the degree of the student's deferential manner in the interview, etc., rather than the more restricted variable which the scale measures.

³ The experimental item which appears in Section IV (as 127C, 134B, and 150C), but is unscored, is highly correlated with other items which are scored on the scale. It is: "In aspiring to the ministry, I preferred to think of myself as a teacher, respected for his thoughtful sermons and stimulating ideas."

only one, shared with E. The student is clear as to whether or not he is here for this reason. Inter-item correlations are high (see Appendix III). Correlations are highest of all the scales (except for E) between the test score and self-rankings of this motivation (RB 2:1) and in factor analysis, I emerges with the clearest distinct factor of all the AIFLERP scales, the first factor to emerge after the underlying conservative-liberal factor (RB 2:2).

It should be emphasized that this scale measures intellectual interest, not ability, and specifically intellectual interest in theological issues. Of course, some correlation may be expected between intellectual interest and ability; I is correlated with seminary grades, though not nearly so strongly as an ability test should be (RB 3:7).

The high I scorer has generally been influenced toward the ministry by teachers rather than by ministers (RB 1:1; RB 3:13). He picks out of Section III of the TSI the demands of "scholarly interest and academic proficiency" about which he feels particularly comfortable (RB 3:14). The I score tends to be correlated with amount of parents' education (RB 1:1; RB 3:11), with whether the student has already had some seminary study (RB 3:18), and with the "Thinking" score of the Myers-Briggs "Thinking-Feeling" dimension (RB 6:1). Given his choice of curriculum majors in seminary, I is more likely to choose to prepare for "teaching and research" in religion than for the parish ministry (RB 3:18). Averages of I are considerably higher in schools associated with universities (II-2). I is correlated with faculty ratings of involvement in seminary life, but not with other ratings (RB 3:6).

Self-fulfillment (F):

Range: 0-24

General mean: 11.9

Local mean:

Standard deviation: 5.3

Standard deviation:

Perhaps an anomaly on an instrument asking the student to sift and analyze his motives for the ministry, the F scale records the degree to which the student feels a strong inner compulsion which defies analysis or elaboration. "I had a feeling of unrest and dissatisfaction with myself until I decided for the ministry." Three elements seem to be combined on this scale: a firm, even compulsive determination; an inner personal source for this determination; an inability or unwillingness to analyze or identify this source more fully. "Here I am; I must be a minister; I cannot tell why, except that the compulsion seems to come forcibly and deeply from within myself."

There may be many different reasons that such a strong personal vocational thrust cannot be more fully explained, and some of these will be considered more fully in suggesting possible interpretations of this scale (see Section 8). It may simply be that Section IV of the TSI does not provide appropriate categories. A high F score may be part of a more general anti- or non-analytic disposition. It may be a protection of some aspects of the vocational decision, such as anxiety-provoking personal motivations, or a strongly "special leading" understanding of one's call.

The last possibility, that F is a way of preserving the special leading understanding of the call, should be especially considered for profiles on which E (Evangelistic witness) is slightly higher even than the high F, and on which SL (Special Leading) and CC (Call Concept) are high. As can be seen in Appendix I-2, the modified paired comparisons form of Section IV of the TSI does not give the strong CC-SL-E student a chance to choose E on every item. He has an E choice on only 12 of the 28 scored items. On 8 others, he has an F choice, which could be readily interpretable by him as a form of an SL-E statement.

The student scoring low on F may mean that he does not feel such firm determination or that he does not identify it as such an inner personal compulsion, or that he resists the "Know Nothing" vagueness implied--not necessarily all three.¹

¹ Attempts by the test developers to speculate for the student as to the nature of his inner motives have not been successful. This seems to be the reason that two attempted items have not proved

F is correlated with the D (Definiteness) scale (see Appendix IV) and with the direct statement of definiteness (RB 3:11). The high F scorer is interested exclusively in the parish ministry and not in such distractions as religious education or teaching (RB 3:12; but see RB 1:1). He chooses field work as a minister rather than another role in or out of the church (RB 3:4), and his vocational decision after seminary tends to be for the parish ministry--most outstandingly so, it should be noted, at Southern Baptist Seminary, among the schools in the follow-up sample (RB 3:2,3).

F is negatively correlated with all the other Section IV scales, except E (Evangelistic witness), and characteristically shows a lonely peak on a profile, with the other scales low and flat, except E. The student is not concerned with the possible motivations suggested by these scales, in contrast with his supreme all-sufficient self-certainty. F is negatively correlated, just significantly, with the "insight" index of the Face Impression study (RB 2:6).

F is part of the general "conservative" factor in the TSI. It is correlated with SL, CC, and E (see Appendix IV; RB 2:2; RB 3:19).

Typical high F is older man changing vocations. One type of student so typically scores high on the F scale, that it may help to define the scale by identifying him as a characteristic type. This is the older, married man who enters theological school after having been engaged in another vocation (RB 1:1; RB 3:11). The student over 30 who has been in another occupation scores significantly higher on F than other students (see Appendix II).

F and E are so closely correlated and so similarly related to other variables (see the description and interpretation of the SL and E scale and RB 3:19) that it is not easy to discriminate the typical profile just given from one that would be equally typical of a high E or SL scorer. The main difference appears to be that the high E scorer is not making such an abrupt change of vocation. The high E has been more closely related with the church and religion for a longer time, and has more likely already been involved in a parish ministry, and is more definite about his decision. E is not correlated with a late age of decision, as is F. Appendix II-1 shows the man over 30 changing vocation to stand out from his younger fellow students slightly more on F than on E.

Leadership success (L):

Range: 0-24

General mean: 11.0

Local mean:

Standard deviation: 4.5

Standard deviation:

On form A, this scale was designated S for "successful experience" and perhaps the designation should have been allowed to stand. It does record the degree to which the student has been led to the ministry by past experience of successful leadership in church activities, especially as this has been rewarding and has built self-confidence.¹

reliably related to the balance of the scale. These are "I felt that the most meaningful and significant investment of my life would be in the ministry," and "In aspiring to the ministry, I preferred to think of myself as an example of the Christian life, finding abundant reward in selfless, dedicated service." (The latter is an experimental, unscored item remaining on Form C--as 124C, 134C, and 139A.) The definition given to faculty raters in the Face Impression study included such speculation, too, which may be the reason that the ratings were poorly correlated with the scores (RB 2:1). The statement included "need to gain peace of mind, relate to people, and attain a sense of happiness."

¹ The experimental item, which appears on Form C as 139B, 142C, and 150A, is not well correlated with other items on the "L" scale, perhaps because it omits the element of successful past experience and focuses exclusively on the leadership role: "In aspiring to the ministry I preferred to think of myself as a leader, creating enthusiasm and enlisting support for a dynamic church program."

It should be noted that the scale picks up a general, and perhaps sometimes even superficial, feeling of self-confidence in the ministerial role, rather than a careful or detailed statement about actual specific activities of the minister. In this it differs from the NL (Natural Leading) scale or the Section III items; as will be discussed in the interpretation section, there is not a correlation between L and NL or Section III. Most characteristically, the feeling of confidence reported on this scale is based on experiences in the past, in boyhood or early adolescence, not necessarily in the student's recent experience.

The L scale items carry the clear implication that the past successful experience is a reason for choosing the ministry, that it is recognized as a basis for the "call". That is, it describes a process of "natural leading" and is correlated the most positively with NL and the most negatively with SL of any of the AIFLERP scales (see Appendix IV). The high scorer, then, not only is reporting confidence-inspiring experiences of past successful leadership, but is also saying that these have become a significant basis of his decision for the ministry. L increases during seminary (RB 4:2) presumably reflecting successful experience during school and field work. The L score is correlated with the reported "liberalness" of the home church (RB 3:19) and defines the end of Factor 1 opposite from CC, SL, and E in RB 2:2.

The low scorer on L may be reporting some feeling of low or untested adequacy. Or he may have had plenty of confidence-building successful experience, but be unwilling to say that this is a basis for his "call".

The high L scorer first considered and decided for the ministry at an early age (RB 1:1; RB 3:13). When he is directly asked, he says he is definite about his decision (RB 3:11), but when he is asked less directly on the D scale, he does not respond so clearly (see Appendix IV). His mother, but less so his father, is likely to have been active in the home church (RB 1:1; RB 3:13).

Evangelistic witness (E):

Range: 0-24

General mean: 14.4

Local mean:

Standard deviation: 6.5

Standard deviation:

"To advance the redemptive outreach of the Christian Gospel and to proclaim the Gospel of Christ to those who are living without it"--this traditional statement of the commission and vocation of the Christian minister is the substance of this scale. The one who can easily express his purpose in this traditional evangelistic way wonders what the rest of the TSI is about; the motivation of the minister is to preach Christ to sinners; other talk of "motivation", on the TSI or in counseling, is alien.

The student who scores low on E is not necessarily rejecting the proclamation of the Gospel as the prime purpose, but he finds this traditional simple formulation of evangelism as an inadequate statement of his own motives and purposes.

The items and the scale are readily identifiable. Students can easily claim them or disclaim them. Variability is greatest of any AIFLERP scale (see Appendix II:1). Items intercorrelate the best of any TSI scale (see Appendix III). So does the experimental, unscored item (124A, 150B, 154C): "In aspiring to the ministry, I preferred to think of myself as a preacher, communicating the church's evangelistic message." The scale correlates best with self-ranking of motivation (RB 2:1). Anyone--high E or low E--could easily write a dozen other items that would correlate well. It is the traditional, well-known position.

On the profile, the E score typically appears as a single very high peak, or along with F (Flexibility), with the other AIFLERP scores low and flat, i.e. undiscriminated except possibly with L (Leadership success) and I (Intellectual concern) a little lower. Although the high E scorer can readily recognize his E motivation, he cares so little about the remaining "motives" that he cannot order them consistently and achieves a low "insight" index in the Face Impression study (RB 2:6).

(Also see RB 2:2, on which the "insight" index loads negatively opposite E on factor 9, even after the other "conservative" measures, SL and CC, have been taken off on factor 1.)

Although sharply distinctive, the E scale items are not so extreme as to be unapproachable by all but the staunch "evangelical". Students who enter with strong I (Intellectual concern), L (Leadership success), and P (Service to Persons) scores are more ready, after three years of seminary, to acknowledge E motivation (RB 4:10). And, although the overwhelming effect of theological education is to reduce E, this does not happen at such schools as Drew, Union, and Yale, where initial E is maintained (RB 4:2). E scores in these schools were, of course, initially considerably lower than at other schools.

The E score is correlated $-.23$ with whether a student seeks extended personal counseling during seminary (RB 3:10). This may mean one or both of the following: (1) The high E student would find counseling selfish (like the L items, which he rejects) and unnecessary. Without necessarily a chip on his shoulder, he finds the Gospel sufficient for meeting problems; vocational counseling is a waste of time when there is a Gospel waiting to be preached. (2) The low E student feels, perhaps regretfully, that the traditional evangelistic formulation is not sufficient with which to state his own purposes, but he is still at a loss in formulating an alternative and seeks help in this.

The high E scorer is not necessarily to be seen as belligerently opposed to analysis or refinement or reclarification or whatever it is that low E is involved in. It is just that high E has come out of a background in which E is all there is, and it still appears to him sufficient.

He is definite about his decision (see Appendix 4; RB 3:11), feels clearly headed for the parish ministry or for missions (RB 1:1; RB 3:12), takes his field work as a parish minister (RB 3:4), and goes into a parish on graduation, avoiding peripheral religious or non-religious work (RB 3:2, 3). He tends to be from a farm family and would return to farming if something kept him out of the ministry (RB 3:16, 17). He rates his home church as conservative (RB 3:19), liked religion courses in college, and also practical and skills courses (RB 3:15). He has close friends, siblings, and other relatives in the ministry, though not generally his father (RB 1:1; RB 3:13, 18).

Like the high F scorer, E is likely to be older, married, with children, and already established (RB 1:1; RB 3:11, 13). But unlike F, he has tended to grow up within a clear religious tradition (see the data cited in the above paragraph), and decided for the ministry much earlier in life (RB 1:1; RB 3:13). He is likely to have had parish experience (RB 1:1; RB 3:13).

Social Reform (R):

Range: 0-24

General mean: 11.3

Local mean:

Standard deviation: 4.4

Standard deviation:

This scale records the degree to which the student is attracted to the ministry by concern for the moral ills, confusion, and tragedies which befall society. How much does he anticipate that work in the ministry will help to bring hope to mankind in general and to resolve the conflicts and inequities among groups and nations?

As with all the AIFLERP scales, it should be emphasized that the R score is not an absolute measure of the amount of his social concern, but only a relative measure of the degree to which such social concern is a motivation for the ministry. There is probably some correlation between total amount of social concern and R score; a student with strong social concerns is more likely to say that this is a motivation for his ministry--else they would have led him to another vocation. But there will be many individual exceptions. In particular, the student with low R score may not be assumed unresponsive to social ills; he may be simply insisting that this is not a major motivation for his ministry, in contrast to other choices among the AIFLERP scales.

The "interpretations" in Section 8 will consider the particular implications for the student who

does say that \bar{R} is a greater motivation than any of the others; this does not necessarily mean that his social concerns are supremely strong, but perhaps only that he cannot affirm \bar{A} , \bar{I} , \bar{F} , \bar{L} , \bar{E} , or \bar{P} as strong. It will be suggested that the high \bar{R} scorer is more certain of his social concerns than he is confident that the church and ministry are the agencies through which he can express them.

The social concern for humanity in general, represented by \bar{R} , should be clearly distinguished from a more pastoral concern for the welfare of individuals, which may be represented by \bar{P} (Service to Persons).

Description of the \bar{R} scale is perhaps helped by reference to the traditions and images of a particular institution, Colgate Rochester Divinity School. The items would seem a priori to represent closely the special emphases and concerns long associated with the school of Walter Rauschenbusch. Empirically, it turns out that the strong \bar{R} scorers apparently fit in closely with the atmosphere of the school. \bar{R} scores are highly correlated with grades ($r = .62$; RB 3:7), with faculty ratings of involvement ($r = .50$; RB 3:6), and with location in a parish after graduation ($r = .33$; RB 3:2, 3).

The \bar{R} score is correlated with the direct Section III statement of anticipation of meeting the demand of resolving social and racial antagonisms (RB 3:14). The correlation with \bar{FL} (Flexibility) (see Appendix IV) and the correlations with MMPI scores (RB 5:1) may be consistent with the pattern of an ethically motivated reformer (i.e., non-conformer); there are significant negative correlations with \bar{Pd} and with \bar{K} and social desirability, and a positive correlation with manifest anxiety.

Suggestive also of aloofness from or disdain of the conventional and status quo is the correlation between \bar{R} and preference of entertaining arts as an alternative vocation (RB 3:17).

Service to Persons (P):

Range: 0-24

General mean: 14.6

Local mean:

Standard deviation: 4.2

Standard deviation:

This scale records the desire to offer personal succor and support to individuals, especially at times of personal stress--the traditional concerns of pastoral care--as a motivation for entering the ministry. Emphasis is on personal, intimate involvement in the lives of others, as a friend and as a helper. The high \bar{P} -scorer is saying, I am in the ministry because I want to be close to people and to help them. Items especially call attention to problems of emotional health and maturity and to "adjustment" crises, and refer only obliquely and minimally to explicit "religious" needs or "religious" ministry. The motivation represented by \bar{P} could presumably be regarded as appropriate for other "service" vocations as for the ministry.

An experimental item (127B, 139C, 154A), although not scored, is well correlated with other items on this scale (about .43), and may be regarded as a good summary item: "In aspiring to the ministry, I preferred to think of myself as a friend, spending time in close and patient relationship with those needing guidance and encouragement."

High \bar{P} scorers tend to be confident about their ability to "work with people" and "handle personality differences", to minister to physical and mental illness, and--at least as they leave seminary--to minister to persons with restricted intellectual interests, and to deal with social or racial antagonisms (RB 3:14). There are, in other words, positive correlations between \bar{P} and all of the "pastoral" items of Section III, but not with the remaining, non-pastoral roles of Section III; there is even a slight negative relation with some.

The higher \bar{P} score obtained by females (see Appendix II) may emphasize the maternal, solicitous nature of \bar{P} .

If he has to choose between the dichotomy of "people vs. ideas", the high \bar{P} scorer seems to have more interest in people. He tends to feel uncomfortable about meeting demands of his scholarly

interest and academic proficiency (RB 3:14). He likes courses in social-human relations better than courses in religion (RB 3:15). His father tends not to be a teacher (RB 3:16), and he is not interested in a teaching ministry (RB 3:12). He is more likely to score on the "feeling" end than the "thinking" of the Myers-Briggs "thinking-feeling" scale (RB 6:1).

Among alternative vocations, some social service occupation is clearly his first choice, but he may have some inclination also towards a "business contact" occupation such as selling, which involves direct contact with people (RB 3:17).

Of the various types of ministry, P expresses most interest in religious education (RB 3:12), in spite of his explicit disinterest in teaching as such. This may, in part, be an artifact of the relation between P and sex. It may in part represent P's interest in working directly with individuals and avoiding more remote administrative and public leadership roles.

5. ADMINISTRATION

The administrator of the TSI has a double task. Hopefully, the execution of one will not contradict the goal of the other.

1. He should, by his words and manner, establish the appropriately open, candid, relaxed attitude toward the test, so that each student is maximally motivated to participate genuinely and frankly in the process of self-reflection and self-discovery which the TSI occasions.

2. He should insure that the standard procedures for taking the TSI are understood and followed. The procedures for answering are somewhat more complex than in most tests, but should not occasion difficulty for college students. The complexity of the answer form is, in fact, a compliment to the student and a recognition by the test (and test-maker and test-giver) that responses to these questions are necessarily more subtle than can be encompassed by a simple true-false statement; it should be interpreted as such.

Establish appropriate attitude:

The TSI is different in two important respects from any other test the student is likely to have taken previously. (In content, it is concerned specifically with the ministry and, even more specifically, with candidates' motivations. In style, it is an open, self-report instrument, in which a student's answers are taken at face value. Made fully aware of these characteristics of the test, the student will presumably be motivated to cooperate with his own candid self-report.) In particular, the students should be made to recognize that the test is not asking them to submit to judgment; it is not trying to smoke out pathology or unfitness or any other uncomplimentary judgment, which may be elaborately inferred from test responses. This test really means it when the instructions say: "There is no right or wrong answer." The test is simply an opportunity, provided for the student's benefit, for him to report explicitly and objectively, on the influences and motivations leading him to theological education. The student should be able to dispel any sense of needing to be on guard and defensive or distracted by trying to second-guess the purpose of the items.

Part of this attitude, hopefully, is communicated by the nature of the test items themselves, part by the instructions printed on page 2 of the booklet. More of it will be communicated by what the administrator says; perhaps still more by his manner.

A brief introductory statement about the purpose of the test should be made. This should be expressed in your own words, after reading carefully the manual, at least up to this point. Your own freedom and ease in making the statement is an essential part of establishing the proper attitude. The following is an example of what has sometimes been said by some administrators:

The Inventory you are about to take is probably unlike others you have taken in that it is designed especially for seminary students. Its purpose is to help both you and the seminary understand more about the factors that motivate you to enter the ministry. Without a doubt this is a vital concern to most of you. No test is going to provide all the answers, but it may contribute to your preparation by guiding your thinking or in giving you better insights about yourself. There are no "right" or "wrong" answers to the questions. You may be tempted to give answers which are "expected" or which you believe will put you in a favorable light. To do this will not assure you of securing the most help from the test. Frank expression of the way you honestly feel will bring the best results.

In manner, the administrator should be calm, open, relaxed. In introducing the test and in answering questions, he should avoid any inadvertent suggestion that there is something mysterious or secret about the test which students may not know now. If questions are asked to which he does not know the answer, he should acknowledge this, he should not hide behind an "I'll explain later." If questions arise which are too complex or personal to be appropriately dealt with before or during the test, he should explain this, and immediately make an appointment to discuss them at another time.

Although most students will be pleasantly surprised at the degree of empathy and sophistication which the test items betray, some can be counted on to resist any attempt to force their attitudes and experience into objective and pre-written test items. Especially, some will resist having to make difficult forced choices. The administrator should acknowledge their protest as having some validity, yet explain that some approximation of reliable, objective self-report is still possible, even though far from perfect; he should encourage the student to go along with this particular attempt as well as he can.

This problem may be greater for students from particular traditions for whom the language of the test may be less familiar and therefore seem to require them to fit a Procrustean bed more arbitrarily. In such cases, the administrator should emphasize point 5 on page 2 of the test, giving students freedom to "translate" and "interpret" the items as they seem best to fit them.

The repetition of items in Section IV sometimes bothers students because they feel that the test may be trying to trap them into inconsistency. The administrator should be prepared to explain, without making a major issue of it, that this is not the case. The test is not trying to trap them in anything, much less inconsistency. The repetition is perhaps a regrettably tedious part of the "paired comparison" basis on which section IV is based--items are repeated so that students have a chance to compare each item with every other item, so as to get a more accurate reflection of their feelings.

The use of a separate machine-scorable answer sheet with the familiar rows of parallel dotted lines may seem to betray the distinction which we encourage the student to perceive between other tests and this test. Perhaps the administrator should acknowledge this and explain that the answer sheets are not to be scored by machine and that this form of answer sheet is used simply because it has become standard and the student is likely to be familiar with it.

Insuring standard procedures:

1. Before administering the test it might be well to insert the answer sheets in the first page of the booklet and instruct the group not to open the booklet until they are told to begin.
2. Each person should be provided with a pencil (soft lead) and an eraser. If a mark has to be erased, it should be done thoroughly.
3. General instructions for taking the test are printed on page two of the test booklet. Specific instructions for Sections II, III, and IV are found at the beginning of the respective sections. When the booklets and answer sheets have been distributed, have the group read the general instructions. After providing them with an opportunity to ask questions, the students may then proceed with the test.
4. Be sure every member of the group understands how to mark the answer sheet. You may already be confident that students are fully familiar with this form of answer sheet. Or you may wish to demonstrate on the blackboard how to fill in the space between the dotted lines, emphasizing, however, that the usual instructions of "heavy black answers" and "no stray marks" do not so strictly apply, since the answer sheets are not to be scored by machine. Illustrations for filling in the blanks are given with item 13 and at the beginning of Sections II and IV. Depending on your previous experience with administration of the TSI to students in your school, you may wish to allude--without opening books--to the form of answer required in Sections II and III, and Section IV. I.e., you can illustrate on the blackboard the four alternative forms of answer used in II and III and the three alternatives used in IV. (However, it is better, for the sake of maintaining the proper mood of respect, to err on the side of assuming students can follow these instructions in the booklet themselves, than on the side of over-condescension.)
5. Although the test is not timed, it should be completed within an hour and a half. Encourage the group to work steadily. It is not wise to "look back" to see how previous questions

were answered. Each item should be treated on its own merits.

6. Encourage the student to ask for clarification if he is not certain how he should proceed. This is especially true with the answering procedures in Section II and IV.

In all of these procedural instructions, the administrator should not let his concern for rigorous and accurate procedures subordinate or sabotage the relaxed, mutually trusting and respecting mood in which the test should be given.

Conditions of administration:

The TSI has typically been administered in a large group. In principle, there is no reason to suppose that it can not be administered individually, or self-administered. Individual administration may even enhance the appropriate attitude of candor. However, no data are available comparing results under different forms of administration.

The TSI has typically been administered to students in the opening days or weeks of their seminary career, most characteristically during orientation week before the opening of classes. Responses may be more personally candid at this time or at least more accurately reflective of the student's pre-seminary self-perception than after the influences of seminary education begin to work on him. Scores may be different if the TSI is administered after several weeks or months. It is known that the full three years of theological education exerts certain changes on TSI scores (see Appendix V). There are no data comparing results from administrations at the beginning and during the first year of theological education. Insofar as any changes between beginning and middle of first year are systematic and general, a school which wishes to administer the test later in the year can simply develop its own local norms for the test, based on such later administration.

No data are available as to the effects on TSI results of administration either independently or as part of a larger test battery. Usage has varied widely in this matter. There is no clear a priori basis for recommending one procedure or another. Common sense considerations such as avoiding fatigue, of course would apply. Administration in conjunction with other tests may increase, but not make impossible, the problem of making a clear distinction for the student, stressed at the beginning of this section, between the nature of other tests and the TSI.

The test is normally administered as a "required" activity in which it is assumed all incoming students will participate. This is probably preferable to any basis of selective administration--if for no other reason than because any selective administration is likely to over-dramatize the situation and impair the calm, candid mood which the test presupposes. It is suggested that the "requirement" be announced and imposed matter of factly; an orientation program may simply announce this as another activity in which entering students will participate. Absentees may be sent a general or individual routine invitation to attend a make-up session.

Further overt or passive resistance to the test should not be fought, but should be regarded as potentially more revealing than a TSI profile would be and can perhaps itself become an occasion for helping the student to confront himself. A persistent hold-out may be questioned about his absence, not imperiously, but with a genuine invitation to discuss it from his point of view; the question can communicate the counselor's acknowledgement that the avoidance of the test may arise from significant and unacceptable factors within the student that may deserve further recognition and elaboration. The stimulation of such a discussion is a welcome and legitimate, though indirect, function of the TSI.

Ordinarily, it is highly desirable for several reasons, for the administrator of the TSI to be the same person who will be responsible for reporting its results and for any counseling which may ensue from a discussion of results. He is most likely to be the one who can establish the proper attitude toward the test during its administration. It is desirable to avoid the indirect implication to the students that the test is one which can be administered by a technician (who shares with students a kind

of limbo of uninitiated ignorance) but must be interpreted by a remote "expert". Perhaps most important, however, it is desirable to associate with the test a particular "contact" person from the first encounter with it. Frequently, at the time of taking the test a student is most motivated to pursue counseling. His concern and initiative ought to be encouraged by acquainting him from the outset with the person to whom he can turn.

6. SCORING

The twelve scored scales--in Sections II and IV--are based on items which are answered on the reverse side of the answer sheet. These sections may be hand scored by using the eight stencils provided for this purpose. Complete scoring requires approximately five minutes per answer sheet, and can be done by any careful person with a minimum of instruction. Scoring is also provided for at the office of the Ministry Studies Board at the rate of twenty cents per answer sheet. Allow two weeks for this service.

Scores can be computed and recorded on the reverse side. For later use, the scores can be readily copied onto the front of the answer sheet and profiles drawn, if desired. Scores and profiles on the front of the answer sheet can be consulted more readily in conjunction with the biographical information recorded in Section I which occupies most of the front of the answer sheet. To consult Section III, which is not scored (except for two items which form part of the NL scale), it is necessary to turn the sheet over.

No special scoring is required for Sections I and III. Key phrases are printed on the answer sheet, so that a counselor with a minimum familiarity with the test can intelligibly read the responses to these sections.¹

In interpreting section III, the counselor simply needs to keep in mind that the A columns represent a positive response--the student does report feeling at home with the particular demand indicated--and B columns represent a negative response--the student does not feel at home with that demand. A double response--blackening both A's or both B's--indicates a more extreme reaction than simply blackening the (A) or the (B).

Incomplete or incorrect answers:

The scorer should scan the back of the answer sheet to be sure (a) that all items are answered and (b) that proper form of answering has been used. If the administrator has succeeded both in being clear and in eliciting a cooperative attitude in the students, there will be few, if any, improperly completed answer sheets. (It may be noted that most errors in answering Section IV will be detected after scoring in the procedure suggested below for checking scoring errors.)

In the case of unanswered or ambiguously answered questions, the most recommended procedure--one which emphasizes the unique counseling and guidance purpose of this test--is to invite the student to complete or discuss the item in the counselor's office. The invitation may be matter of fact and straightforward, simply indicating that it is difficult to interpret the test without all the items completed and conceding that the student may have found the item ambiguous enough that he could not conscientiously reply without opportunity to explain and interpret his answer. In addition, it may be assumed though unstated, by the counselor, that unanswered questions--especially in the forced choice format of these sections--may sometimes represent particularly difficult or conflictful questions, which may receive useful illumination in a counseling interview.

¹ Warning attention should be called to one unfortunate ambiguity which appears on the present edition of answer sheets. Item 20 of the test asks whether father was away from home for extended periods of time. The answer sheet contains the phrase "father at home." This discrepancy may confuse some students who may, in effect, answer the answer sheet not the test booklet, with a "yes" response meaning that father was at home. Unless this has happened--which can be determined only by follow-up inquiry--a counselor should interpret an answer as though the answer sheet were printed "father away from home." This error will be corrected in future editions--unless counselors should report that follow-up inquiry with students provides such an excellent opening for counseling that the inadvertant error should be deliberately retained.

In many instances of improper answering, it is still possible, if desired, to recover or to estimate the student's intended answer without consulting the student. Where a counselor adds marks to an answer sheet, he should use a colored pencil to distinguish his estimates from the student's response. Some examples follow.

In Section II, students sometimes indicate extreme answers by marking only the extreme columns, labeled A or B, rather than by a double marking of both A or both B columns. Normally, for the counselor to add marks to the intermediate (A) or (B) columns will be faithful to the student's intent.

In Section II, an unanswered item, or an item given both an A and a B answer, most likely indicates the student's inability to make a choice. As recommended above, the student may be invited to discuss these, especially if such instances are frequent. For scoring purposes, it is suggested that no correction be attempted. Leaving the item unmarked, or marked both A and B, will make it not count in either direction on that scale score--which presumably approximates the student's intention.

In Section IV, each numbered item should have three black marks, two given to one of the letters, one to another, and none to the remaining letter. If a student has used fewer or more than three marks, but has still in some fashion indicated preferences among the alternatives, the scorer can distribute the proper three marks.

If a student has failed to indicate preferences among the three choices--most usually by leaving the item blank, one of two estimating procedures may be followed, the first simpler, the second perhaps more precise. (1) It may be assumed that the student would most want to indicate no distinction among the three choices, and that therefore the three points for that item should be distributed equally among the three choices, blackening one space each for A, B, and C.

(2) It may be assumed that the best estimate of the student's likely response is his response to other items on the same scales. In this case, the three points for the item should be distributed in proportion to the total score on the three scales represented on the item. By consulting Appendix I-2, the counselor can determine which scales are represented by the A, B, and C choices. After scoring the remainder of Section IV, he can determine tentative total scores for those three scales, and add the remaining three points (for the missing item) to these scales in proportion (rounding to the nearest whole number) to the tentative totals. For example, suppose item 126 is unanswered, the scorer can discover from Appendix I-2, A, B, and C represent, respectively, the E, I, and P scales. Scoring the remainder of Section IV, he finds that, without item # 126, the tentative totals of these three scales are as follows: E 16; I 9; P 12. Dividing the three points of item # 126 approximately in proportion to these totals, he adds 2 points to E, and 1 point to P. The estimated total score, therefore, for these three scales is as follows: E 18; I 9; P 13.

Scoring Section II:

Stencils. All eight scoring stencils are used for Section II. Each scale requires the separate counting of plus (accepted) and or minus (rejected) responses, and stencils are used as follows. (Be sure that the clipped corner of the stencil corresponds with the clipped corner of the answer sheet.)

Stencil 1 = D+	> Definiteness
Stencil 2 = D-	
Stencil 3 = NL+	> Natural Leading
Stencil 4 = NL-	
Stencil 5 = SL+	> Special Leading
Stencil 6 = SL-	
Stencil 7 = FL+	> Flexibility and
Stencil 8 = FL-	
	CC+ > Concept of the Call
	CC- > Concept of the Call

For each stencil, count the number of marked answers which appear through the open spaces of the stencil. Every blackened space is counted as one. This raw score--the total number of blackened spaces--should be written on the appropriate line, at the right margin of the answer sheet,

through the square opening provided. Care should be taken to enter the number on the plus line when a plus stencil is being scored and on the minus line when a minus stencil is being scored. Notice also that two different Section II scales are on stencils 7 and 8; these are not easily confused since they appear on separate parts of the answer page and stencil.

Computing scores. Use 50 as a base figure. Add to it the number of (+) items and from this total subtract the number of (-) items. (For example, if the D+ score is 8 and D- score is 3, the total score would be $50 + 8 - 3$, or 55. If the NL+ score is 2 and the NL- score is 9, the total score would be $50 + 2 - 9$, or 43.) This procedure is followed for each scale in Section II.

Scoring Section IV:

The first seven stencils are used, one for each scale. There are no "minus" scores, and there is no special computation. The score for each scale is obtained by counting the number of blackened spaces showing through the openings of the stencil. This number may be entered directly in the appropriate square on the answer sheet.

Checking the scoring:

Let the student be the check. It is not inconsistent with the nature of the TSI and with the attitude toward its use which this manual recommends to suggest that the most satisfactory checking of the scoring--as of the validity of the whole test--may come simply in asking the student whether the obtained scores seem to represent himself as he sees himself. In fact, one counselor who has used the test for several years has reported that in all the instances in which students have seriously disputed the profile of themselves produced by the test scores, the discrepancy was traced to a scoring error. Certainly, in noting any important discrepancy, such as between the CC and the SL scores, the scoring should be checked before more elaborate psychological hypotheses are invoked to explain the discrepancy. However, partly because students are inclined to trust the scores and to use these to help form their self-perception, counselors may normally want to use some check to be sure the reported numbers represent what the student has actually said about himself on the test.

Section II can be checked only by re-doing the scoring. A spot-checking may be sufficient to warrant the assurance that the stencil-counting has been done accurately. If spot-checking shows that errors have been made, all the stencil-counting should be replicated. A more thorough check should be made of the computation procedure. The most frequent error here is in the confusion of signs, and a fairly quick check can determine that the score is on the proper side of 50, and by the proper amount. If the formula recommended above has been used in computing the scores, a different formula may be used in checking the computation. Of the two recorded plus and minus totals, subtract the smaller from the larger. This difference should be added to 50 if the plus is the larger total, and subtracted from 50 if the minus total is larger. As the scorer becomes familiar with the means and variability of scores in his school, he will become particularly suspicious of greatly deviant scores.

Section IV can be most satisfactorily checked by adding the scores of the seven scales together. If the total is not 84, there has been an error in taking or in scoring this section. Inspection of the answer sheet can determine whether the student has followed instructions and blackened three spaces for each item. Re-scoring with the stencils will determine where error has occurred in scoring. As with Section II, familiarity with the expected scores will help the scorer guess where an error has occurred.

Plotting profiles:

By folding the answer sheet, the scores can be copied into the appropriate boxes on the front of the sheet. For more ready visual reference, these can be plotted on the graphs. To make comparison more easy, the counselor may wish also to plot on each student's answer sheet the means and

deviations of his own school, or other appropriate reference group. Familiarity with the local pattern of scores may make this unnecessary for the counselor. The possibility that the student may feel unwarranted concern by seeing his deviations plotted--because of past experience with personality test profiles--may make it undesirable for the student.

7. PRACTICAL ARRANGEMENTS AND "STRATEGIES" IN USING TEST

This section explores a range of procedure and contexts in which the TSI may find use in a theological school. The section may be read in conjunction with Section 2, which presented actual cases illustrating use of these various "strategies".

There is an order to the eight suggestions that follow. They are intended to represent a range along two parallel dimensions. The suggested "strategies" rely decreasingly on the initiative of the student and rely increasingly on the counselor's confidence in the validity of particular interpretations of TSI scores. All of the suggested strategies emphasize the role of the test in helping the student to describe and clarify important questions in his own vocational thinking.

Communicating school's concern for student's vocational planning:

The language of the test is generally experienced by a student as surprisingly understanding of his own thinking and quandaries--which he may have previously supposed were unique and personal--and effectively goading of further clarity. In administering the test (even should it not be scored) the school, and particular faculty members, are saying that they can understand these questions and possible indecision on them and regard this as an important facet of the student's thought and experience. The effect might be similar to that of a panel discussion on the topic. Thus, the student may feel himself in a different atmosphere than he may have anticipated.

Encourage reflection and discussion:

The administration of the TSI can legitimately and effectively stimulate and guide further self-reflection on vocation and can encourage a student to seek out the counsel of others, especially those faculty members who have sponsored the test.

An announcement or notice as students complete the test may acknowledge that they may have concerns or questions raised by the test items and should make some provision for further responsible attention to them. Students should be allowed at the time to indicate definite evidence of their interest and to make a tentative commitment to pursue it. The invitation may take one of various forms; students may be asked to indicate if they wish to be informed of test results, to discuss test results, to discuss the test even without results, or to simply consult the counselor. Specific appointments may be made at the time, or later.

Discussion among students as they complete the test is common, and probably is desirable. They generally wish to share some of their immediate reactions. Some counselors may regard this as an uncontrolled and relatively fruitless dissipation of concern and may make special effort to interpose the commitment to counseling, suggested in the above paragraph, before such discussion among students. Other counselors may feel that discussion among peers is also useful and may take care that the time schedule provides that the test is followed by informal groups, such as at meals, rather than by more highly structured activity or individual free time.

Invitation to discuss results:

After the tests have been scored, public announcement may be made of the availability of scores and the possibility of discussing them with the counselor, presumably with opportunity for students to sign for specific appointments. An announcement so timed will presumably not attract some who would have responded at the time of testing, but may conceivably attract others who have had vocational concerns subsequently enhanced.

Routine discussion of results with each student:

It may be part of the counseling pattern in the school for students to have a routine "check-up" interview with an advisor or counselor after the first month or so of school. This may be in connection with a review of test results. The nature of the TSI makes its results a plausible and useful discussion-starter for such an interview. No particular suspicion or threat normally attaches to discussing these results, and such discussion may quickly lead to significant issues in the student's vocational planning and adjustment to school.

Selective counseling on basis other than TSI results:

Counselors may sometimes invite selected students to an interview at the counselor's initiative. This may be done on the basis of questions raised by some aspects of the student's performance in the school, by the reports of faculty members, by the results of personality tests in which the counselor detects possibility of some "pathology". Even when it is not the TSI results which lead the counselor to suggest the interview, the TSI scores may provide a natural and meaningful starting place for the discussion. Most "problems" that may be suggested by performance or by other test results are likely to be related to vocational and motivational questions. Starting with the TSI results is more likely to be starting where the student "is". These results are likely to be closer to his self-conscious awareness than are the concerns which has led the counselor to act.

Selective availability for counseling on basis of TSI:¹

The counselor may feel enough confidence in his interpretation of particular TSI results to feel some probability of a "problem", that a student is headed for major difficulty unless he can deal with the "problem", perhaps through counseling. But his concern for effective counseling procedures, his respect for the integrity of the student, and his awareness that his interpretation of the TSI may be in error all require him to leave initiative to the student. He must wait for the student to "hurt" enough and to "trust" the counselor enough to seek counseling. However, this does not leave the counselor without a basis for action. Selecting certain students (unknown to them) on the basis of the TSI results, the counselor may be particularly attentive to be sure the student is aware of the counselor's (or another's) availability for counseling. He will do this primarily by seeking to develop, mostly through informal contacts, a warm, candid, and open relation with the student. Ideally, of course, he undertakes such an inviting "pre-counseling" relation with all students. But TSI results may help him select students, with some probability, as to those with whom such a procedure may be more urgent.

Or he may use TSI results to suggest to other faculty advisors the names of particular students who may be deserving of such special pastoral attention and openness. This kind of general referral does not require sophistication concerning the TSI on the part of the other advisor; it does require his understanding that the counselor is acting only on the basis of probabilities and possible error in interpreting the TSI. The other advisor should also be aware that "problems" inferred from TSI results are not the same as "pathological" personality characteristics. There is no judgment of "good" or "bad" necessarily involved in assessing the TSI scores but only the estimate of internal conflict or dilemma which may be responsive to counseling.

Selective counseling on basis of TSI:

The counselor may feel even greater confidence in his interpretation of TSI results and or may find that taking greater initiative than suggested above does not impair the relationship or effectiveness of counseling. He may feel that certain students should be explicitly invited to discuss particular implications of the TSI results. This is not normally in the mood of the dean summoning a

¹ Appreciation is due William Oglesby for helping to clarify this strategy.

student to explain a personal indiscretion or an academic lapse. More likely, the counselor simply raises the question as to whether the student recognizes either directly or indirectly the same situation that the counselor perceives in the test results. If the student fails to recognize or resists the interpretation, the counselor's reaction will vary according to his training and theories of counseling. He is most likely to drop the subject for the time being but try to maintain his availability, as suggested in the preceding suggestion. He may, given particular training and stance, undertake with the student to explore the bases for resistance.

"Tuning" a counselor when the student seeks counseling:

Whether or not the test is used in other ways suggested in this section, test results may be held on file to be available (to any faculty member sufficiently familiar with the test and manual)(see final paragraph of this section) whenever a student seeks counseling, at any time during his seminary career. The counselor's interpretation of test results will presumably not supersede the student's own formulation of his concerns. But the results--like such biographical material as that in Section I of the TSI--may help the counselor better "hear" and better understand what the student is saying. Even though the results are not explicitly mentioned during counseling, they may suggest to the counselor particular interpretations or overtones of the student's remarks which he will reflect to the student. It can then be left to the student to judge whether this "TSI-slanted" interpretation of what he is saying appears valid and useful.

Use with other faculty members:¹

General education. Psychologically sensitive faculty members sometimes wish to increase the sensitivity of their seminary colleagues toward the actual characteristics of students--such as individual differences and motivational ambiguities--which they feel it is important for instructors to recognize. A discussion by the faculty of test results of the incoming class may become the occasion for such instruction, even when--as is commonly true--colleagues do not put great confidence in the validity of specific results. Just as with students, introducing the topics which the TSI raises may be sufficient stimulus for faculty members to reflect on their own experiences with students. So sensitized, they may recognize more readily than otherwise, for example, instances of vocational conflict within students.

Test results may also be useful to emphasize the fact of variability among students. It may make some of their classroom experiences less frustrating, for example, for seminary instructors to recognize that their classes contain students low, as well as high, in D (Definiteness), or I (Intellectual concern), or E (Evangelistic witness), or R (Social Reform), or P (Service to Persons).

Specific "counseling" of colleagues. Some test users have reported that they have been queried by faculty advisors about test results of particular student advisees. Responding to the concern implied by the question and not simply to its literal content, they have found that the request frankly betrayed--as concern for objective tests results often does--some degree of bafflement or even sense of inadequacy that the colleague experienced in the personal counseling relationship with the student. Without condescension or involvement in a formal counseling relation, it may be possible to be of assistance to the colleague in meeting this aspect of his own vocational dilemma.

Consultation with faculty advisors on specific TSI results:

To whom, in faculty and administration, should TSI results be disclosed or distributed? The answer depends in part on the particular student personnel policies, practices, and responsibilities in the school. Responsibility for student guidance is highly centralized in some places, widely distributed in others. It is, of course, desirable that all those dealing with students have available

¹ Appreciation is expressed to Charles Kemp for some of the suggestions made in this paragraph.

as much data as they can responsibly use.

But a prior consideration, in the case of the TSI as with all tests, lies in the qualifications prerequisite to the use of the test, as these are discussed in a previous section. TSI test scores should not be reported to anyone who is not himself qualified by previous experience and by the study of this manual, as discussed in the previous section. The basic principles implied by the opening paragraph of this manual should be firmly understood: the scores are based on student's self-report, are not susceptible to esoteric interpretation, are not in themselves a sufficient basis for decision either by the student or by authorities; the scores are initial summary statements of a student's vocational position, which he may be encouraged to consider and develop further.

Nor should test scores be filed with a student's record which is generally available to faculty members. Test scores should be kept separately and available only to properly qualified persons.

If there are several persons who are otherwise qualified, it may be desirable to hold a local "training institute" in which this manual and actual cases from the school are jointly studied.

Section I of the TSI answer sheet contains concisely a great deal of personal information which may be useful to an advisor. Some schools make the front of the answer sheet the basic personal record which an advisor keeps on his students. Such distribution of Section I does not ordinarily raise questions. Although the information should clearly be regarded as confidential, a student normally will assume that it is available to responsible faculty members. However the questions of the above paragraph should be raised about distribution of the test results which may appear on the front of the answer sheet. There is also some question about the practical desirability of distribution, and potential loss, of original answer sheets. Therefore, it is strongly urged, that if Section I data are to be distributed among faculty advisors, this be only in the form of a photo-copy of the front of the answer sheet before scores are recorded on it.

8. POSSIBLE INTERPRETATIONS OF SCALES

Introduction

Section 4 of this manual discussed each of the scales and offered interpretations of the scores which seemed clearly derivable from a common-sense understanding, or the "face validity" of the items themselves. Those "descriptions" (called thus to distinguish them from this section) were supplied with whatever additional supporting and validating data seemed appropriate from the studies which have been done with the TSI.

Section 8 offers possible interpretations which extend beyond the face meaning of the items and raises possible implications of the scores. Extending the descriptive interpretation of the scores, such questions may be asked as, What past experiences or personal characteristics may lead a student to produce such a score, particularly as these relate to understanding his motivation? What are the future vocational steps which are more likely for a person who has achieved this score?

The interpretations which will be suggested have been derived from two sources, (1) from hunches and intuitions which have developed in actual discussion of TSI scores with students, and (2) from more controlled logical inference from a study of the items and scales themselves. Those interpretations have been retained and reported which seem to be consistent with empirical data from the studies which have been conducted with the TSI. These data appear in Appendix IV of the manual and in the series of Theological School Inventory Research Bulletins which are published as supplements to the manual.

The suggested interpretations are obviously highly tentative, or even dubious. The entire section should be read in the context of the word "perhaps" which is hereby entered on behalf of all the pages of the section, to avoid repetitiously punctuating each one with the necessary qualification and reservations.

Even where some plausibility attaches to an interpretation as a general tendency, considerable caution needs to be exerted on behalf of individual differences. For any interpretation offered in this section, exceptions are more likely than instances. The same score may represent many different things in different people. Hopefully, a pattern of scores may have less variable meaning, but systematic analysis of patterns of scores has not yet been undertaken. The need to expect exceptions is dramatized by the instances, such as with the A (Acceptance by others) scale, where even contradictory interpretations are offered, albeit with some suggestions of criteria for applying one or the other. The expectation of exceptions should also be reinforced by a look at the tables in the Research Bulletins where the correlations which support these interpretations, even when statistically greater than chance, are almost universally low.

The use of these interpretations is foreseen as follows:

1. They should not be presented directly or indirectly to the student. (In this, they differ from the descriptions of Section 4 which might commonly be shared with the student, since they are relatively direct and obvious restatements of the items.) This recommendation is made more because the interpretations may be irrelevant and wrong than because they may be threatening. Interpretations here given are likely to interfere with the student's own task of interpreting his scores, which is likely to be far more accurate.
2. These suggestions may properly "tune" a counselor on some of the possible interpretations and conclusions which may develop during counseling based on TSI scores. If the interpretations have validity, they are more likely (again, probability not implying anything near certainty) to apply to students than are some other interpretations. The counselor may use these interpretations to help him hear and understand what a student is saying about himself.

3. The chief intended use of these interpretations is more as a model of method than as a set of delivered conclusions. Hopefully, the following pages display some of the kinds of questions which may be raised in connection with TSI scores and expose some of the kinds of reasoning and data which may be used in answering them. The user of the test is invited more to duplicate the process of making such interpretations with his own students and with their data than he is to accept these interpretations and force them on the students.

Interpretations of Patterns of Scores

The suggestions of interpretation which follow are made for each scale individually. Obviously, a student and counselor will be considering a whole pattern of scale scores, not each one individually. This should make two differences.

One score or group of scores will often make necessary a qualification or reinterpretation of the appraisal that might otherwise be made of a particular score. Some suggestions are made in the following pages as to where this may be necessary. For example, it is suggested that a pattern of strong scores on CC-SL-E requires qualification especially of interpretations that might otherwise be made of A and F.

Interpretations and implicit predictions may summate. Where similar interpretations seem to follow from different and normally uncorrelated scores, these should reinforce each other and become stronger, when several of the scores are produced by the same student. For example, some suggestions are offered and supported that each of the following scores suggest greater commitment to the parish ministry and greater likelihood of proceeding through seminary into the parish: high D (Definiteness), high NL (Natural Leading), high A (Acceptance by others), low I (Intellectual concern), low R (Social Reform), and low P (Service to Persons). Since these scores are not ordinarily highly correlated--especially among A, I, R, and P--each one ought to bring independent support to such an interpretation in the case of a student who shows several such scores.

These suggestions must be left, at the present, as reasonable probabilities. Empirical analysis has so far been limited to single scales.

General interpretation of "conservative" and "liberal" scores:

Factor analysis of TSI scores in the Face Impression Study revealed (RB 2:2) a strong first factor which may probably be regarded as representing a "conservative-liberal" dimension. It was defined by the pair of SL (Special Leading) and CC (Call Concept) at one end and L (Leadership success) at the other. E (Evangelistic witness), D (Definiteness), and F (Self-fulfillment) scores were also loaded on the conservative end, and FL (Flexibility) scores on the liberal end.

Although data from the study reported in RB # 3 have not been factor analyzed, a study of the correlation tables makes it clear that a similar factor would emerge from these data (RB 3:19). Not only do the TSI scores show similar patterns of intercorrelation, but also several sets of other data show consistent correlations with the scales defining the two ends of this factor. SL (Special Leading) appears to carry the strongest correlations with these variables on the conservative side, with the other scores carrying less correlation, approximately in proportion to their lower loading on Factor 1 in the Face Impression Study.

Uses. This identifiable conservative-liberal factor running through the scores provides several aids for interpretation of particular score patterns.

1. When a student's score pattern coincides approximately with this factor--e.g., relatively high SL, CC, E, D, and F scores, and relatively low FL and L scores--the most straightforward interpretation is that he shares this general conservative response to TSI items, particularly the type of response characteristic of the older man leaving some other occupation for seminary study

(see below). Such a straightforward interpretation should have priority over any more special interpretations of particular scale scores.

2. A student may wish to use this multiple estimate of "conservatism" to compare himself with his own school or denomination, to help assess the degree to which he may feel congruence with his associates, or conversely a "misfit". Since it does appear a strongly identifiable factor, it may be particularly important for a student to recognize discrepancies, so that he can better articulate and deal with them. The multiple estimate of several scales may be more satisfactory than any single scale, because a discrepant score on any particular scale might deserve a special interpretation and not be attributable to discrepancy on "conservatism" or "liberalism".

3. Since the scales have an identifiability beyond their loading on this factor (except for CC and SL, each also defines its own factor in RB 2:2), more specific interpretations of particular scale scores is possible, especially when one of the scales stands out uniquely from the remaining conservative-liberal pattern. Such interpretation is especially aided by noting instances in which the research results show that particular scales characteristically deviate from the prevailing conservative-liberal pattern. Such exceptions to the prevailing pattern of correlations (RB 3:19) occur most with the D and F scales, which are also least weighted on Factor 1 in RB 2:2. These exceptions provide support for interpretations which will be offered for these scales.

The data in Table 19 of RB # 3 will now be summarized. These are the characteristics which appear to be associated more with the total conservative-liberal factor than with any particular scale.

There is no independent criterion of "conservativeness" or "liberalness" to justify this designation of the cluster of correlations. The closest available data are the ratings of the conservativeness of home church. This rating is presumably positively though imperfectly related with a student's own position, and correlations with this rating are indicated on the sixth line of RB 3:19.

The correlations suggest that one large block of students which contributes to the "conservative" group of scores--i.e. high scorers on SL, CC, E, D, F and low scorers on L and FL--is the group of older men, married and established in another occupation, who enter the ministry and seminary at a relatively late age. Appendix II further indicates that the average scores of men over 30 who have not previously been in the ministry are substantially higher than other students on the five "conservative" scores and lower on the two "liberal" scores, and also I. The "conservative" scores tend to be correlated with low ratings of parents' (especially mother's) activity in the home church, further suggesting relatively little church involvement in earlier years. So also does the lower A score of older men (see Appendix II), and the negative correlation between these "conservative" scores and the report of a minister father.

Another cluster of variables suggests that the "conservative" scores are associated with less interest or involvement in intellectual activities. They tend to have poorer grades (even in more "conservative" schools such as Southern Baptist--see RB 3:7), to like "skills" courses, and not to have been influenced in their decision for the ministry by teachers. They express more comfort about dealing with people with restricted intellectual interests than in meeting demands of scholarly interest and academic proficiency.

The conservative-liberal dimension also appears to be associated with differences in commitment to the parish ministry, before, during, and after seminary, the more conservative showing the greater commitment.

The conservative scorers are less likely to become involved during seminary in extended personal counseling. This presumably represents two factors: the "conservative's" resistance to "secular" methods of dealing with personal predicaments; and/or the "liberal's" greater likelihood of experiencing vocational and other indecisions, since he is deprived of the greater certainty and sense of direction which the "conservative" has.

The five conservative scores (and also NL) are related with the expressed comfort about making many personal sacrifices, as other scales are not. This presumably represents a more conventional interpretation of the requirements of the ministry.

Interpretations of D (Definiteness)

High D more committed to church vocation than to theological education:

The theological educator should not mistake a strong D score to imply that the student is eagerly anticipating intense involvement in the life and work of the theological seminary. On the contrary, the high D scorer may be impatient with the necessary three-year delay in getting involved in his ministry. His commitment and concern are for the parish ministry, and he may find the intellectual concerns of the seminary sometimes irrelevant and tedious.

Faculty raters tend to judge poorly the high D's involvement in seminary life (RB 3:6). At several points, correlations with the D scale suggest D's low enthusiasm for intellectual affairs. He tends to be uninterested in a teaching ministry (RB 1:1; RB 3:12), or in teaching as an alternative occupation (RB 3:17). He expresses comfort over dealing with persons with restricted intellectual interests (RB 3:14). He is somewhat unlikely to get involved in such intensive experiences as clinical training (RB 3:9) or extended personal counseling (RB 3:10). Many of these characteristics are related to the more general "conservative" factor, of which the D scale is a part. But the correlations tend to be stronger with the D scale than with the remainder of the "conservative" factor, suggesting a particular relationship with D beyond the relation with "conservatism", particularly in light of D's relatively weak loading on the factor (RB 2:2; RB 3:19).

Interpretations of NL (Natural Leading)

General social adaptability, and avoidance of difficulty?

To achieve a high NL score, a student must consistently choose responses suggesting ease in vocational adjustment and reject items suggesting difficulty and conflict. One may suspect that this "optimistic" or "self-confident" tendency is a more general personality characteristic which is tapped here only with respect to his vocational adjustment because that is all that he is asked about. The NL scale may be measuring the more general personality at least as much as it is eliciting a specific report about any unique confidence about any other venture.

This suspicion may be strengthened by the report (RB 5:1) of substantial and significant correlations of the NL scale with several scales of the Minnesota Multiphasic Personality Inventory--all of which may be regarded as reflecting an "apparent confidence" variable. NL is correlated positively with K, Social Desirability, and Ego strength, and negatively with Depression, Social introversion, and Manifest anxiety. (The NL scale is the only TSI scale to be so highly correlated with MMPI scales, suggesting that it may be the only one tapping more general personality characteristics--at least of the kind measured by the MMPI.)

It is also of interest that NL scores are consistently reduced as a result of three years of seminary education (RB 4:2). Since seniors, when re-tested, were instructed to report on their present attitudes, one might expect seminary training to increase NL, if this scale primarily measures specific ease about pursuing the ministry as a vocation. (NL is correlated with amount of previous experience in the ministry.) To the degree that NL reflects a possibly over-optimistic self-confidence, denying difficulty (cf. K scale of MMPI), one would expect the generally maturing and introspective experience of seminary to decrease NL. This appears to be the case.

High NL given up lure of academic life?; Low NL escaping to teaching?

Although NL is correlated with evidence of a background of intellectual interests (RB 3:13, 16), it is negatively correlated with any evidence of present intellectual interests. The high NL scorer tends not to be interested in teaching, in or out of the ministry (RB 3:12, 17), scores low on I (see Appendix IV), and prefers possibly less intellectual college courses (RB 3:15). NL appears opposite I on factor 2 of RB 2:2.

This may represent the degree to which NL's confidence-building experience in parish work has brought him safely over the hurdle of feeling tempted by an academic career. Or, it may equally well represent the degree to which a positive interest in teaching and intellectual issues is prompted by some lack of confidence of the kind represented by the NL scale.

Interpretations of SL (Special Leading)

Lower SL-scorer finds seminary life more congenial:

The special leading understanding of the call, and correlated attitudes toward other religious questions, may not be fully congruent or harmonious with the prevailing mood in theological schools. The two following interpretations will suggest that this may be due (1) to the low SL-scorer's greater appreciation of analytic attitudes and modes of thought or (2) to his greater readiness to accommodate to institutional, rather than individualistic patterns. These are characteristics which may be related more with the total "conservative" factor than uniquely with the SL scale. The fact that increase in SL and CC (Call Concept) during seminary tend to be correlated positively with grades (RB 4:9) and to a lesser degree with faculty ratings (RB 4:8) suggests that the absence of rapprochement may be due to such characteristics of the student who comes with the SL-CC viewpoint than to the faculty's lack of sympathy with the SL-CC point of view.

This interpretation will receive necessary qualification by the last two interpretations to be offered for the SL scale.

SL is correlated negatively with seminary grades (RB 3:7), and tends to be reduced by three years of theological education (RB 4:2). SL tends to be correlated negatively with faculty ratings of the quality of a student's motivation and of his capacity for growth and positively with ratings of emotional problems (RB 2:7,9,10). The low SL student is more likely than the high SL student to get involved in such intensive experiences as extended personal counseling or clinical training (RB 3:9,10).

Some disinclination toward intellectual or other analytic enterprise:

The high SL scorer is denying the relevance, at least for understanding the nature and validity of his call, of reflective, analytic, and reasoning skills, which represent a large part of the enterprise of theological education. To the degree that his mistrust or disuse of analytic skills is a more general attitude, he may find himself out of step with the institution which is the "intellectual center of the church's life."¹ A similar interpretation will be offered for the F (Self-fulfillment) scale.

SL leads the "conservative" factor on some of the correlations (RB 3:19) suggesting minimal intellectual background, such as slight influence of teachers on the vocational decision, and liking of skills courses. SL also shows a more unique relation with other variables suggesting minimal intellectual or analytic interest. Low SL is more likely than high SL to have parents who are college graduates (RB 1:1; RB 3:11), and to have "insight" into his own motives on the Face Impression Study (RB 2:6). Low SL's greater inclination for personal counseling or other intensive experience is also consistent (RB 3:9).

SL more individual, less concerned with institution:

The SL items represent a (supremely Protestant?) individualistic interpretation of the call. The call is between the student and God and not a matter for conference with other persons or for confirming experience within the institutional church. For the strong SL scorer, the "secret call" makes the "providential" call and the "ecclesiastical" call superfluous.²

¹ H. Richard Niebuhr, op. cit., p. 107.

² Ibid., p. 64.

The data have been cited above indicating that the lower SL scorer tends to receive better grades and otherwise fit in better with the theological school. There are also some slight hints that the low SL scorer has fit in more congenially in the past with the institution of his home church. The Low SL scorer is less likely to have changed denominations or churches (RB 1:2, RB 3:18, 19). And it is of interest that SL is the only one of the "conservative" scales (except F) which is not correlated with the rated adequacy of the religious instruction in the home church (RB 1:1; RB 3:13).

Some high SL scorers not inflexible:

To offset the slight intransigence which may be implied in the preceding interpretation concerning some high SL scorers, it should also be recorded that at least some high SL scorers are quite flexible. This same point will be made in discussing the highly correlated E (Evangelistic witness) scale. To the degree that a strong SL score is the result of a somewhat restricted background and not a chip-on-the-shoulder belligerence, the attitude appears quite responsive to the modifying influence of seminary.

SL scores tend to decrease generally during seminary education (RB 4:2). The decrease comes primarily (RB 4:12) from those students who entered seminary from the more restricted background of the older man, already with some parish experience, who may be transferring from a more restricted denomination, who is from the farm, and who is suspicious of arts. The correlation between these variables and change in SL during seminary tends to be similar in magnitude and opposite in direction from the correlation between these variables and initial SL.

Very low SL scorer may have trouble with his personal faith:

An extremely low score on SL (as low as 30) means that a student has given a doubly emphasized rejection of a more religiously orthodox interpretation of his experience every time, or almost every time, he has encountered it. Any particular score of any particular student needs to be interpreted in the context of his particular institution and background. But any student entering a theological school is entering a context in which it is expected that some orthodox interpretation of experience is customary. A student who so decidedly chooses the naturalistic and rejects the orthodox option at every possibility may, in other situations, find it difficult to understand or express himself in the language of the Christian faith. If he finds so much difficulty accepting any of the traditional language of the church, it seems legitimate to question his future adaptability to church life.

No analysis of TSI scores other than linear correlations has been undertaken, so that there are no data relevant to such an interpretation, as here suggested, of an extreme score.

Interpretations of CC (Concept of the Call)

No unique interpretation of CC score alone:

The CC items do not ask the student to report on himself--but only on his attitudes toward the call. The CC scale is highly correlated with SL (Special Leading), and CC shows a pattern of correlation with other variables very similar to that of SL, though with generally less magnitude of correlation. For these reasons, no special interpretation of the CC score taken alone seems in order. The CC scale is intended to be useful as the normative judgments expressed on it are compared with the student's report of his own experiences and purposes on other scales, particularly the SL scale. Some of these will be considered on the following pages.

High CC score, with high NL and low SL:

The discrepancy between high CC and low SL scores is perhaps most frequently encountered, sometimes accompanied by a relatively high NL score. This pattern suggests that the student feels (for one reason or another) that special leading is the proper way to enter the ministry, but that natural leading is the only type he himself has experienced. He wants to be a minister, and feels comfortable in the role. People encourage him, the denomination may look upon him with grateful and covetous eyes, and he does well in church work. But he simply has not experienced the necessary validating call, and this seems to him an insurmountable and tormenting stigma.

If such a discrepancy shows up clearly in the TSI scores, especially if there is a 10-point difference in the scores and they are on opposite sides of 50, it is likely to be a strong and prominent problem in the student's mind. He is likely to be able to articulate it and perhaps eager to discuss it.

The discrepancy invites various interpretations and various possible resolutions for different students. The student can presumably benefit from reviewing the three perceptions represented by the three scores to be sure that each one is "realistically" and firmly grounded. His high NL may be an illusory over-confidence. His low SL may result from an inadequate understanding of the nature of the special call he prizes; he may have received it and not recognized it. His high CC may result from a particular theological attitude which he may wish to re-examine.

If a student is highly resistant to such re-examination or if such re-examination modifies the student's attitude on one or more of the scales, but if the CC-SL discrepancy persists, more clinical interpretations may suggest themselves. For example, the student may come to recognize in his own experience a call approximating that which he regarded as normative (i.e. increases SL), but may also increase the level of expectation (i.e., increases CC, to keep ahead of SL). Or if the student comes to re-interpret his conception of the call (lowering CC), he may also make the conviction of his own call recede (lower SL) so as to maintain the discrepancy.

A student may be prompted to maintain such a discrepancy by some form of guilt feelings or needs to denigrate himself. These may be focussed particularly on the ministry; it may be especially the ministry from which he unconsciously needs to bar himself. For example, he may feel it too presumptuous to assume the role previously held by a father or "father-figure", (items 19 and 52 might be consulted for hints); or the ministry may represent a standard of moral perfection for which he feels unworthy (cf. item 119 for hints).

These speculations, particularly the latter ones, are intended only to be suggestive of directions in which a student's review of his situation may move. There are no data indicating that these speculations are necessary or even likely interpretations.

High CC, with low NL and high SL:

A sizable discrepancy between a high SL score and a low NL score may raise some concern--more typically concern in the counselor than in the student, who is less likely to feel turmoil himself that the student with high NL and low SL. Particularly if accompanied by a high D score, the counselor may feel a risk that a student is relying too exclusively on a special leading, "secret" call, in the face of disconfirming evidence from the area of the "providential" call and natural leading.

If this pattern is accompanied by a high CC score, this is consistent with the high SL score, and leaves open a wide range of theological and personal issues which may account for the persistence into the ministry, despite low NL.

Low CC, with low NL and high SL:

However, if the low NL and high SL pattern is accompanied by a low CC score, this increases the anomaly and removes much of the cultural and theological grounds for the persistence into the ministry. I.e., the student no longer is reporting (as he is with a high CC score) that his background and conviction make an SL experience normative and obligatory. Rather, he is reporting that the natural leading, which he is not heeding, is normative. The focus is left much more sharply on the student personally to help understand the nature and significance of the high and apparently dominant SL report.

Low CC and high SL:

Any sizable discrepancy in which CC is as much as 10 points less than SL and on the opposite side of the 50 mid-point ought to be regarded as a puzzling anomaly. The student is claiming a special leading experience without prizing it.

One interpretation is that the CC scale has been answered carelessly (especially if this score is close to 50). Perhaps the strong special leading into the ministry is so striking and sufficient that the student has not reflected very much or very thoughtfully about any theological questions, including judgments about the proper nature of the call.

Another possibility is that the student has performed a kind of "demythologizing" or reinterpretation of orthodox and traditional language as it applies to his own experience, so that he can affirm SL items, but (perhaps because he has been so preoccupied with trying personally to establish that he has a valid SL call) has not yet come to generalize this reinterpretation in a way that would allow him to affirm CC items.

Still another possibility may be that the student, though affirming his own SL call, is attempting to demonstrate his open-mindedness with respect to the call of others into the ministry.

Interpretations of FL (Flexibility)

High FL scorer finds seminary environment congenial:

The open, probing, tentative attitude toward beliefs and ideas which the FL scale measures is highly congenial with the atmosphere of theological education. The high FL scorer is much more likely than the low scorer to welcome the analytic, searching enterprise of theological education and in turn be welcomed by seminary faculties.

FL is correlated strongly with the I (Intellectual concern) scale, indicating the concern with intellectual issues (see Appendix IV). It is correlated even more strongly than is I with seminary grades (RB 3:7) and with faculty ratings (RB 3:6). FL is loaded on the positive end (RB 2:2, Factor 2) which is defined by I, but which could be regarded as representing a kind of "pioneer vs. homebound" dimension, since the end opposite I and FL is defined by A, NL, L, and D, scale which together may suggest a kind of rootedness in the familiar.

Seminaries increase FLexibility (RB 4:2) except at such schools as Brite, Colgate Rochester, and Yale, where FL is already strong in the entering class (see Appendix II). Individually, the increase comes mostly from students who entered with strong SL, CC, and E scores (RB 4:10).

The high FL scorer has been influenced in his decision by teachers and the low FL scorer, more likely by family and friends (RB 1:1; RB 3:13). The high FL scorer is most interested in the teaching ministry (RB 1:1; RB 3:12) and expresses most comfort about meeting demands of scholarly interest and helping to resolve social-racial antagonisms, but discomfort about dealing with people with restricted intellectual interests and about administrative work (RB 3:14).

Low FL scorer finds parish ministry more congenial than high FL scorer:

FL is negatively correlated with most of the indices of interest in the parish ministry. Apparently his intellectual curiosity and analytic interest finds the seminary much more congenial than a parish church, in which he may anticipate, accurately or inaccurately, too little "breathing-room" or sustenance.

However, he finds this to be true more as he goes through seminary than as he enters. As he enters, he does not show nearly the negative interest in parish ministry that high I (Intellectual concern) does (RB 1:1; RB 3:12). But he is likely to find field work during seminary (RB 3:4) and placement after graduation (RB 3:6) outside the parish ministry. He is inclined to judge somewhat harshly the religious training offered by his home church (RB 1:1; RB 3:18).¹

¹ One possible interpretation suggests itself in connection with FL's avoidance of the parish, with the correlation with birth order and with comfort over working with people (RB 3:14, 18) (both suggesting a possible index of dependence), and with the suggestion advanced in Section 4 that a high FL score may partly represent "social desirability". The FL score may be indirectly reflected to the comfort a student feels in the relatively structured security of the "ivory tower". Perhaps he can afford his "flexibility" of mind only because he personally has found comfortable embrace in the arms of "alma mater" and retreat in the academic grove from the many personal demands of truly open engagement with life. It may be that FL's avoidance of the parish is as much his fear that it will cast him into a personal and social unstructured morass as that it will restrict his intellectual freedom or stunt his intellectual growth.

This possibly far-fetched suggestion is related to the suggestion that will be made that the high I scorer may be avoiding people.

Interpretations of A (Acceptance by others)

Serving in church and ministry is natural and expected:

For the high A-scorer, his own place in the church and its ministry has long been part of his self-image or "identity", absorbed from his parents, largely unquestioned, along with most of his other fundamental attitudes and stances about himself and about the world. It has been generally and long understood that he would, of course, go into "full-time Christian service", an expectation which he feels no embarrassment about acknowledging and to which he will continue to conform, perhaps without ever examining or deciding clearly for himself the bases for his vocational decision.

The high A-scorer has decided earlier for the ministry (RB 1:1; RB 3:13). He may come from a smaller town (RB 1:2; RB 4:11; but see RB 3:11). He appears more often (see Appendix II) in denominations (e.g., Lutheran and Disciple) and in regions (e.g. Southern) in which there is more "solidarity" of community and more often a common expectation of a boy's future ministry. The quality of his motivation is rated strong at schools representing such traditions (RB 2:7) and in general he is able to gain the approval of faculty raters, on first impression (RB 2:2; notice that A is loaded, uniquely among TSI scales on the two factors 8 and 12, defined by interviewer ratings). He is likely to get better grades at schools representing such traditions, but much poorer grades at schools (e.g. Colgate Rochester, Yale) emphasizing individuality and without such great community ties (RB 3:7). He is younger (RB 1:1; RB 3:11) and is not likely to have had other vocational experience (RB 3:13). More of his close friends may have entered the ministry (RB 1:1; but see 3:13). He liked religion in college (RB 3:15; A and E are the only TSI scales significantly correlated with liking of religion). He seems likely to go straight through theological education in the conventional and standard three years (RB 4:11), neither extending the time for one reason or another, nor dropping out. And he is somewhat likely to go into the parish ministry, rather than a less conventional form (RB 3:2,3), especially in the Disciples' Brite College of the Bible.

More comfortable as member of a group than as leader:

The high A's responsiveness to the expectations of his elders does not particularly equip or qualify him to assume a leadership role of his own as a minister. He is ready to function most naturally, comfortably, and effectively in a structured and familiar situation in which expectations are clear, and novelty and need for decisions are slight. Both A and L (Leadership) scales reflect the positive influence of early home and church experiences, and they are positively correlated. But it is the L scale, not A, on which the student may report the degree to which the early experiences have included personal successes and have developed a sense of self-confidence.

Of the various forms of the ministry, he is clearest about being negative concerning mission work, presumably the most individualistic and structureless (RB 3:12). In seminary he chooses or is assigned field work as a young people's leader or in some other role within the church other than as the minister (RB 3:4; A is the only scale significantly correlated with the amount of non-minister church field work). On Section III of the TSI, he expresses discomfort about the prospect of such demands as making personal sacrifices, exercising dynamic leadership, working with people, solving social and racial problems (RB 3:14). Although correlations between A and all Section III items are negative in direction, the magnitude does not reach statistical significance in the case of the more "aloof" and less personal demands, such as administrative work, public speaking, and scholarly interests.

Taken by themselves, the concessions of discomfort on the Section III items might be regarded as representing the same kind of health and mature candor which is suggested below as

a possible interpretation of the A scale. Both in acknowledging A and in admitting some qualms on Section III, the student may be simply admitting what is true for all in some measure, but which he recognizes more readily than some others do. But in the context of the other data cited in the paragraph, the interpretation offered above seems the more plausible, taking the Section III items at face value.

Is high A-scorer over-conformist and personally timid? Is low A rebellious?

The A scale may point to excessive forms of the tendency to feel conforming and comfortable about the expectations and approval of others, with the corollary disinclination to risk others' disapproval or to assume personal influence over others. Some high A scores may be reflecting a more general compliant, home-bound, people-pleasing personality, quick to accommodate to the comfortable status quo.

Conversely, and perhaps more plausibly, the A score at or near zero may reflect a rebelliousness against elders or an anxiety over any residue of dependence on them--a still raging adolescent rebellion.

A appears to be correlated negatively with Flexibility (see Appendix IV). Although the trend is for A to be positively correlated with ratings of field work performance (where people-pleasing is easier) (RB 3:5), this is not true with ratings by faculty members (who may be more critical of such tendencies) (RB 3:6). Factor 5 of the factor analysis (RB 2:2) suggests a possible other- vs. inner-directed dichotomy with F (Flexibility).

There is some suggestion of aloofness and of withdrawal from personal involvement with people in the cluster of data suggesting an aesthetic interest (RB 3:15, 16, 17) and preference for courses in science or the structure of society rather than in social-human relations (RB 1:1; RB 3:15). This distinction is paralleled by the tendency for a greater preference for government administration and public service over social service as alternative vocations to the ministry (RB 3:17). If during seminary he acquires one of the three ERP (Evangelistic witness, Social Reform, Service to Persons) purposes for the ministry, it is the most aloof one of the three, that of social reform (RB 4:10).

Or is high A mature?

It is reasonable to assume that all, or virtually all, students come to theological school backed by a substantial amount of parental influence, in one form or another, at one stage or another. Yet there exists a tendency among late adolescents to affirm their independence and to deny reliance on parental direction. It may be a mark of substantial maturity for a student to overcome this adolescent anxiety and to be willing to acknowledge parental influence without fearing that such concession jeopardizes his integrity as a man or the validity of his call as a minister.

Whether the A scale reflects such maturity or the home-bounded timidity suggested in the previous section may depend on whether or not the student has yet passed through a phase of more or less candid rebellion. There is likely to be great individual variation in whether a high A score may be interpreted in the direction suggested here, or in the previously suggested direction.

But regardless of the divergence of interpretation of a high score, it should be emphasized that both this and the previous section point toward a similar interpretation of a very low score--that here is conscious or unconscious rebellion or denial in some form and in some degree.

The A scale is correlated just significantly with the index of "insight" in own motivations used in the Face Impression study (RB 2:6). There is an almost universal and significant tendency for A to increase during the three years of theological education (RB 4:2). Faculty ratings of emotional problems tend to be correlated negatively with the A score (RB 2:9) and more strongly with the faculty perception of A motivation. The correlation between A and faculty rating of capacity for growth is significant at some schools (RB 2:10).

Low A score may represent defense of special leading:

The interpretations of the A scale otherwise suggested must be deferred in the case of a low A score by a student with high CC (Call Concept) and SL (Special Leading) scores. In this case the denial of parental influence may not be attributed to personal anxiety or rebelliousness, but rather to a desire to preserve the special leading definition of his call. He does not wish to attribute decisive basis for his call in any "natural" process, and of the seven AIFLERP scales, an A item would appear to be the most suggestive of "natural leading".

A is slightly correlated negatively with SL and CC scales (see Appendix IV).

Interpretations of I (Intellectual concern)

Weakly committed to any actual form of ministry (except teaching):

In pursuing his own theological and intellectual quest by entering seminary, the high I scorer may assume in only a general way that this will lead to an actual vocation. If pressed as to the possible aftermath of seminary, he may suggest that he will be a teacher (since this is the prime way the intellectual inquirer supports himself in our society), but he is likely to be vague and perhaps unrealistic about the nature of the role he foresees. He sees himself even less clearly in any other religious vocational role. His major, if not exclusive concern and experience is with abstract issues. He has yet to involve and commit himself in such realities as actual parish life of a church.

The high I scorer reports himself indefinite in commitment to the ministry (see Appendix IV; RB 3:11). When asked to choose among five forms of the ministry, he decidedly chooses teaching, and almost as decidedly says he is not interested in a parish ministry, nor, to a lesser degree, in missionary work (RB 1:1; RB 3:12). He has not had previous professional experience in a parish (RB 1:1; RB 3:13). He tends not to have close friends or relatives in the ministry (RB 1:1, 2; RB 3:13). There is a slight tendency for him to drop out of school, without a degree (RB 3:1), and to go into non-religious work if he does graduate (RB 3:2, 3). He definitely chooses field work during seminary in work other than as a parish minister (RB 3:4). He reports discomfort about all the demands listed in Section III of the TSI, most notably those most clearly identified with the parish ministry, making personal sacrifices, exercising dynamic leadership, setting a personal example, dealing with illness or with persons with restricted interests (RB 3:14).

Ready to be converted to more conventional vocation interests:

The high I's disinterest or disinclination toward parish life and ministry is not so much rebellion or resistance as it is a kind of naivete. He is ready, once seminary education exposes him to dimensions of religion and church beyond the intellectual, to find new interests and purposes. He is, after all, intellectually flexible (see Appendix IV).

During seminary, the high I is likely to increase on all of the more "conventional" scales of the TSI: D, NL, SL, E, P (RB 4:10). He increases his direct statement of definiteness of commitment (RB 3:11). He becomes significantly more interested in a parish ministry and less interested in teaching (RB 3:18). The correlation between I and choice of field work jobs outside of the church (RB 3:4) is much greater than the correlation between I and post-graduate choice of jobs outside of the church (RB 3:3); by the time he finishes seminary, the high I scorer is more ready to work within a parish church than when he sought field work assignments during seminary training.

The intellectual interest of I does not make him more likely to remain longer as a seminary student and does not make him particularly strongly attracted to teaching as an alternative vocation; these correlations are near zero.

Some hints of rebelliousness toward the parish:

Some students with high I scores are more openly impatient or disillusioned about the parish church and its ministry. Perhaps their impatience with the church drives them into an intellectual citadel, or perhaps residence in this towering citadel makes them more inclined to judge the church harshly. Perhaps also the critics' numbers among the high I scorers may be greater now than it was in the 1959 sample. It is a matter of conjecture as to whether such impatience, as compared with

simply naive remoteness from the church, makes a student more or less intractable, intransigent, and resistant of the seminary's conversion of him into a parish minister.

Some hints of possible seeds of such impatience are found in the following data: insistence that ministers have not influenced the religious training (RB 3:13); a tendency to dislike religion and skill courses (RB 3:15). The correlation with father being in a church vocation (RB 3:13) suggests that some I's are on a rebound and are, at least momentarily, using I interest to move away from the kind of ministry they most likely have seen at home. Or, perhaps, they feel a genuine interest in the area of their father's work, but are rebelling against following his vocation, so that their interest is "disguised" in terms of intellectual aspects of religion. The correlation with law as an alternative vocational choice (RB 3:17) is perhaps consistent with a judgmental or "prophetic" attitude, holding the church up to its plumbline.

Is I an escape from people?

The intellectual ivory tower, with its preoccupation with abstract ideas, is often reputed to be a haven for those incompetent or uncomfortable in accommodating themselves to the world of living people. Some data suggest that this possibility needs to be kept in mind in interpreting the I score.

The I score is substantially correlated with whether or not the student seeks extended personal counseling, or other intensive self-study experience during seminary (RB 3:10). This may be interpreted as reflecting his vocational indecision, but it may also be interpreted as a consequence of difficulties felt in more general personal and inter-personal affairs. I is also negatively correlated with liking of courses in social-human relations (RB 3:15). Liking of physical education is strongly correlated with I (RB 3:15); this is puzzling unless gym and field provide safe expression of otherwise troubling inner motives. The correlation with the I, N, and T scales of the Myers-Briggs (RB 6:1) and with the F and Anxiety scales of the MMPI (RB 5:1) are also suggestive.

Interpretations of F (Self-fulfillment)

Another expression of Evangelistic motivation and Special Leading:

If SL (Special Leading), CC (Call Concept) and E (Evangelistic witness) scores are very high, and if F is about four points less than E, the most plausible interpretation is one suggested in the other section describing the F scale--that the student is using the F items further to express his evangelistic motivation and the special leading character of his call. The "denial" element involved in F is turned against any possible "natural leading" implications of A, I, L, R, or P. If E is slightly higher than F, the two possible interpretations on the following pages bear less plausibility. However, the correlation with E does not completely mitigate them either. Individualism and, perhaps to a lesser degree, impatience with analysis would appear to be characteristics of a high E scorer also.

If F and E are both high, with F slightly higher, then it may be that the interpretation of F should dominate, especially that of "know-nothing" opposition to analysis, and that E is primarily another form of expressing this. This may be especially true if F is preferred over E, on the four items (136, 146, 147, 148--see Appendix 1-2) on which the student must express a preference between F and E.

"Know-Nothing" impatience with analysis in any form:

The high F scorer knows unambiguously where he is going (and probably also what he believes and doesn't believe) and is likely to be impatient with anyone who raises questions or qualifications about vocation or belief. It is not his nature to analyze or introspect, nor to be understanding of those who do. This applies both to matters of belief and conviction and also to personal affairs and actions. He is not likely to fit comfortably into rigorous intellectual inquiry nor to have a sympathetic ear for those feeling personal problems and ambiguities.

The high F scorer is likely to be resistive toward the TSI and is hardly a willing candidate for further exploration of his motives. He may even be a somewhat reluctant student in the school, undergoing its demands only as a prerequisite to the real task of being a parish minister--whatever that means to him.

F is correlated negatively with grades in seminary (RB 3:7), and with faculty ratings of involvement in school life, especially at Colgate Rochester (RB 3:6). Of the various "peripheral" forms of ministry, it is only those concerned with education in which F shows a disinterest (RB 3:12). His parents are less likely to have college education (RB 1:1; RB 3:11). F is correlated negatively with Flexibility and most negatively with I (Intellectual concern) and with P (Service to Persons) among the Section IV scales (see Appendix IV).

Despite his strongly professed interest in the parish ministry, the high F does not express confidence, on Section III of the TSI, about meeting any of the pastoral demands normally associated with such ministry (RB 3:14). Correlations are zero or slightly negative with all of the "pastoral" items on Section III, and show positive tendencies only with the more individualistic roles, such as serving as a personal example, expressing dynamic leadership, or making personal sacrifices.

Still emphasizing the antithesis between F and theological inquiry, theological education does decrease F (RB 4:2) and the initial high F scorer is inclined to decrease D and increase I during his three-year tenure (RB 4:10).

An individualist:

Some of the correlations with the \bar{F} score suggest that it may in part be derived from a more general self-sufficient individualism.

This may, for example, be the explanation for the \bar{F} scorer's remarkable rate of survival at Southern Baptist seminary and his placement in Southern Baptist pulpits (RB 3:1, 2, 3), if the stereotype about Southern Baptist individualism can be trusted. The \bar{F} scale polarizes (RB 2:2; Factors 5 and 10) with the two scales referring to relations with other persons, \bar{A} (Acceptance by others) and \bar{P} (Service to Persons). Correlation with the social introversion scale of the MMPI is suggestive (RB 5:1).

Consistent with the negative correlation with \bar{A} , the high \bar{F} scorer appears to have arrived at seminary "on his own". His parents were likely to be inactive in their home church (RB 3:13). His father is not a minister (RB 3:13), but is more likely, in fact, to be a farmer or in another outdoor occupation (RB 3:16). He denies particularly the influence of his friends (RB 3:13). He does acknowledge the influence of a minister, presumably the minister of his recent mature years (RB 3:13).

On Section III of the TSI, the demand to which he feels singularly responsive is the most individualistic of the ten on the list, that of making personal sacrifices (RB 3:14).¹

The stalwart individualism and self-sufficiency may even be so great in some cases as to raise the question of a repression of intra- and inter-personal disturbances. \bar{F} is correlated, in fact, with faculty rating of "emotional problems" especially at more "liberal" schools (RB 2:9).

Fewer ministers' children at Southern schools--a footnote:

The finding of a negative correlation between having a father in a church vocation and scoring \bar{F} or one of the other "conservative" scores (RB 3:13, 19) may be part of a more general pattern of shift among generations. An incidental finding of the research reported in Research Bulletin # 3 was that Southern schools are less likely to have ministers' children. For example, the proportion of ministers' children at each of the schools in the sample was: Brite, 9.8%; Colgate Rochester, 12.8%; Drew, 6.2%; Southern Baptist, 7.6%; Union, 12%; United, 14.2%; and Yale, 15.2%. It would appear that Southern ministers do not reproduce themselves as well as northern ministers, or else their sons go north to school (but not to Drew, which appears an exception to the trend). The minister's son has a higher \bar{I} score ($r = .20$), is especially interested in a teaching ministry ($r = .14$), and is rated well by seminary faculty on involvement in school ($r = .16$).

¹ On this variable, as on so many others correlated with the \bar{F} scale, this has an obvious relationship to the fact that older men changing vocations score high on \bar{F} . The older man giving up his occupation is, of course, likely to claim an ease of making sacrifices. But the interpretation of this relation between \bar{F} and personal sacrifice is not thereby discounted. It may in fact be the more primary relationship, which helps to explain why the older man changes into the ministry, not vice versa.

Interpretations of L (Leadership success)

A "boy wonder" with a shaky future?

The high L scorer tends to be young and inexperienced. His confidence is all based on past experience in which he was perhaps a kind of leadership prodigy, but is not necessarily based on a realistic expectation or encounter with the actual responsibilities of the parish minister. As he encounters the actual ministry more seriously, his confidence may falter a bit. The validating correlations all refer to his past; the scale is not favorably predictive of his future.

He tends to be young, unmarried, without actual professional experience in a parish, or in any other vocation (RB 1:1; RB 3:11, 13). Despite his successful experience, he is disinterested in the parish ministry (Is he too good for it?) or in missions (RB 3:12). He is not likely to obtain a field work assignment as a minister, but most likely to work in a non-church assignment (RB 3:4). After he graduates, there is some tendency for him to enter non-pastoral work (RB 3:3), more so at some schools than at others; he is more likely to go into the parish from such schools as Colgate Rochester, Drew, and Yale.

The tendency of the L scorer to acquire E and R motivation during seminary (RB 4:10) may further represent the inadequacy of the L motivation to sustain him through seminary, but also his openness to grow.

Despite his self-confidence, he is more likely than not to seek out personal counseling during seminary (RB 3:10), and he is unlikely to remain a student after three years (RB 3:18); perhaps he finds seminary too readily raising embarrassing and/or realistic questions from which he is inclined to retreat back to the arena of his "successes". He acknowledges discomfort as he completes seminary - more than as he enters - about facing some of the demands of the ministry--making personal sacrifices, serving as a personal example, and dealing with illness--and claims confidence about none of the demands (RB 3:20).¹

Past experience mostly as an individual; encouraging self-reflection:

Related to the previous discussion of L as a "boy wonder", it may be that his successful experience has been largely alone. He may not have close friends considering the ministry (RB 3:13; but see RB 1:1). He comes from a larger town or city (RB 3:11). He tends to be an only child (RB 3:18).

Such individual experience may be associated with a tendency to be self-reflective. The L items carry an implication of introspection and self-reflection on experience which is not shared by other scales. The L score is correlated .19 with the "insight" index used in the Face Impression study (RB 2:6). As already pointed out, the concession of discomfort on Section III (RB 3:14, 20) and the inclination to seek personal counseling (RB 3:10) may be related.

The negative correlation with the number of unanswered questions on the MMPI (RB 5:1) is possibly related to such habits or preference for self-understanding.

¹ As with the A scale, the correlation with these concessions of discomfort may simply reflect L's self-knowledge and his unwillingness to deny what others also feel but deny. This may also be the reason for his seeking of counseling. See the discussion that follows.

Interpretations of E (Evangelistic witness)

Need to consider student's context:

With the high variability, even polarity, of the E scale, and with sharply divided value judgments associated with it, it is particularly important with this scale to consider the background and present context of the student before attempting any interpretation of his score.

Data in the TSI studies easily demonstrate the wide variability of prevailing school attitudes towards emphasis on the E-type statement of motivation. Correlations of E with faculty rating of involvement in the school range from $-.66$ (at Colgate Rochester) to $+.35$ (at Southern Baptist) (RB 3:6). Correlations with seminary grades range from $-.42$ (at Colgate Rochester) to $+.29$ (at United) (RB 3:7). E is negatively correlated (RB 2:7) with interviewer rating of quality of motivation at Concordia ($r = -.57$) and Garrett ($r = -.52$) and with all the 18 schools of the Face Impression Study taken together ($r = -.15$), but ratings at Southern Baptist are positive ($r = +.18$).

Given these commonly recognized differences in prevailing attitudes and "images" among the schools, a student's E score needs to be considered carefully in relation to his school, denomination, and background. For example, about a high E at Colgate Rochester, but about a low E at Southern Baptist, one might raise questions concerning possible rebelliousness toward prevailing norms or concerning conflict with them in the future.

The situation of an E in each school needs careful consideration. For example, among the schools studied the only noticeable correlation between E and drop-out ($+.26$) is at Brite (RB 3:1), perhaps Brite attracts some students who find the prevailing E (school average: 13.5. See Appendix II-2) not as high as they may have anticipated. At Yale and at Colgate Rochester, high E's tend to be transplanted; there are significant correlations between E and previous change in denomination and previous seminary experience. At Yale, E's rate themselves poor on emotional health ($r = -.36$), tend to get counseling ($r = .37$), to show positive results on field work ratings (RB 3:5) and not to avoid the parish ministry (RB 3:2, 3). At Colgate Rochester, E's tend to rate their emotional health good ($r = .43$), not to seek personal counseling ($r = -.31$), to have negative performance records (RB 3:5, 6, 7) and not to enter the parish ministry (RB 3:2, 3).

Similar to F on "impatience with analysis" and on "individualism":

These two interpretations offered in connection with the F (Self-fulfillment) scale may also be suggested here, but without the overtones of psychological defensiveness or intransigence which seemed valid suggestions with F.

E is more open to change, under the impact of seminary education (see next section and RB 4:2, 10, 13). There is not, in rating data, a suggestion of emotional difficulties correlated with E, as there is with F (RB 2:9).

Correlations with MMPI scales (RB 5:1) would seem to support the distinction. E is the only TSI scale significantly correlated positively with the Ma scale of the MMPI, perhaps related to E's prime purpose to be busy at his task. E is correlated negatively with manifest anxiety, whereas F is correlated positively with social introversion and negatively with ego strength.

What is proposed here for E - especially the distinction from F - is probably also true for SL (Special Leading).

Not inflexible:

The characteristic high E scorer appears to be the older student who has been raised in a relatively rural, conservative community in which he has found meaningful evangelistic experience which has propelled him into ministerial work, and, after some years, at last into full professional training. As he enters seminary, E is supreme among the AIFLERP motives (with F as a stand-in, where necessary) because that is all he has known. As seminary exposes him to additional dimensions of purpose and interest, he is responsive, not resistive to them, and moderates the supreme priority of the E.

RB # 4 shows changes in E. RB 4:13 records the fact that decreases in E during seminary are associated precisely with the pattern of the mature older man with parish experience entering seminary. RB 4:10 emphasizes the corollary fact that the initial high E scorer does accept substantial changes in his TSI profile during seminary, more changes than are associated with any other initial score. Changes in E are not significantly associated with any other variable except for those noted in the paragraph below and with the fact that clinical training reduces E ($r = .14$).

Incidental to the above discussion, and perhaps qualifying it, it should be acknowledged that evangelistic formulations are sometimes regarded as related to more rigid and defensive personalities (e.g. J. G. Ranck, Religious conservatism-liberalism and mental health. In W. E. Oates (Ed.), The Minister's own Mental Health, Great Neck, New York: Channel Press, 1961, pp. 65-75). In incidental support of this view it should be noted that an increase in E during seminary was associated with the following preferences expressed on entrance to seminary: Liking of courses in the structure of society ($r = .13$), father in an organizational occupation ($r = .15$), law as an alternative vocation ($r = .13$), and diplomatic service as an alternative vocation ($r = .21$). All of these initial preferences suggest an inclination to structure and organization, so that the student who increases E during the impact of seminary years may be construed as seeking a haven in the more simplistic statement. This is in contrast to the student who comes into his high E "naturally" through the course of his religious development within an evangelical tradition.

Interpretations of R (Social Reform)

More certain of own social concern than of church as agency for expressing it:

The high R scorer--especially when R shows a lonely peak on the profile, or when I (Intellectual concern) and R are the only peaks--may be a bit tenuous concerning his confidence in the church's ability, or his ability as a minister of the church, to satisfy the strong motives he feels to right social wrongs. Most typically, he has not grown up with close involvement or identification within the church, this institution may bear a share of the skepticism he feels toward the social status quo.

R is correlated negatively with D (Definiteness) and with NL (Natural Leading), suggesting a tendency toward discomfort with the ministerial roles (see Appendix IV). It is correlated negatively with A (Acceptance by others) and with L (Leadership success), the two scales reflecting past identification with the church. R may either lack past involvement with the church or want to reject it. He tends to report his parents as inactive in the church (RB 1:1; RB 3:13), that his decision has not been influenced by family (RB 3:13), and that the religious training of his church was inadequate (RB 1:1; RB 3:13). All of these correlations may be interpreted either at face value or as representing a present rejective attitude toward home church; in either case R tends to have a tenuous relation with a church base. He tends to report a few close friends, few relatives, and few others from his church entering the ministry (RB 1:1,2).

R tends to show greater interest in other ministries than the parish (RB 1:1; RB 3:12). Administrative work--the shibboleth of those most critical of the institutional status quo of the church--is the only Section III demand about which R tends to express misgivings (RB 3:14). Apparently, R's personal self-confidence leads to a slight positive correlation with all other Section III items. R and P (Service to Persons) show the strongest tendency of any AIFLERP scale, toward negative correlation with administrative work.

The reason that the unscored experimental item (134A, 142A, 154B) does not correlate substantially with R items may be that it emphasizes the peculiar efficacy of the Christian message, as the others do not. It reads: "In aspiring to the ministry, I preferred to think of myself as a prophet, holding forth the Christian conscience as the only dependable force for our times."

R may have relatively transient (and adolescent?) motivation:

The kind of motivation represented by R--especially when it is dominant and solitary for the student--may be frequently an initial all-out reaction against the ills of the existing social order, which blooms as the student first matures beyond home perspectives and naive acceptance of the status quo. It may be an undifferentiated and unsophisticated type of disaffection, which generally matures into clearer perception of specific ills and specific possibilities of remedy and into a patience with that which cannot be changed overnight. Strong motive for social reform may often, then, be a "phase" which many (but by no means all) students may have at some point before, during, or after seminary but which tends to dissipate except as it is more maturely redefined.

However, even though the specific strong thrust toward social reform may frequently be transient, underlying concerns, which have produced and sustained the R, may persist. These may include a discontent with existing social institutions, including the institutional church, and a tendency to be concerned about "mankind in general" and relatively unconcerned about specific individuals. These will be considered on following pages.

The transiency of R as well as the implied disaffection with the church may make it possibly a relatively poor motive to sustain a student into the ministry; and there are hints (RB 3:1,2,3) of trends

confirming this suspicion. But there is considerable variability among schools, some schools apparently attracting or nourishing more mature and sustaining forms of R than others.

Although seminary education changes the average R very little and without consistent pattern (RB 4:2), there is considerable change among individuals. For those who enter seminary with strong R motivation, it tends to lose its exclusive predominance, and vice versa. This tendency is greater for R than for any other scale--except FL (Flexibility), with which R is correlated.

Increase of R tends to come from those who entered seminary with strong A (Acceptance by others) and L (Leadership success) scores, i.e. reporting closest home-bound identification and self-confidence (RB 4:10). Initially high R, in turn, tends to be distributed to I (Intellectual concern), L (Leadership success), and P (Service to Persons). The increase in L is the more common kind of symmetrical exchange statistical regression. But the increase in I and P among initial high R's is more remarkable because they increase correlations which were already positive (see Appendix IV). Other indices of intellectual interest tend to show positive correlation with initial R, then lose it during seminary (RB 4:14).

There is a tendency (RB 4:14) for those whose decision was influenced by family and friends to enter seminary with lower R and to increase, and for those whose decision was influenced by minister and teachers to enter seminary with higher R and to decrease.

Like I: marginal involvement. Like P: search for relevance:

Although I (Intellectual concern), P (Service to Persons), and R show distinct factors (RB 2:2), they are positively correlated with each other and share (uniquely among AIFLERP scales) negative correlations with D (Definiteness) and positive correlations with FL (Flexibility) (see Appendix IV).

R and I--especially when they are the only high AIFLERP scores--may both represent a kind of distant, non-involved interest in religion and its institutional forms. Intellectual problems and social concerns have inevitably touched on religion for the student, but they, rather than the church and its ministry, are primary. There may be a kind of teasing fascination with religion but a search for some vocational niche which will minimize actual personal involvement in the institution.

R and P may both represent a kind of critical fascination with the church and ministry. When these are both high, we may surmise that the student wants to take seriously the ministry (perhaps for reason of having been committed to it for many years), but finds its traditional forms and formulas inadequate for his own sense of the needs of the world. Attention to definable social ills and vivid personal needs may seem to him the way to make the ministry relevant. A major difference between P and R appears to be that R is less interested in individuals as represented, for example, by his disinclination to enter clinical training (RB 3:9).

Interpretations of P (Service to Persons)

Some dissonance between P and traditional conceptions of ministry:

P motivation tends to emphasize concern for individual well-being in "this world". As such, it may be embraced by those particularly concerned to make the Gospel specific and relevant to the actual conditions of men. It may be regarded with suspicion by those concerned to emphasize the separateness of the Gospel's salvation from mere worldly psychological and physical well-being. It may be eschewed with a kind of surprise or naivete by those brought up within a more restricted "other-worldly" view of the church's mission.

The phonetic confusion, which some users have encountered, between "P-score" and "Peace Corps" may not be entirely irrelevant. The motivation and definition of ministry represented by P may bear the same ambivalent relation to more "evangelical" definitions that the Peace Corps does to more traditional missionary enterprise: Some may see it as a fulfillment and extension, some as dilution and cheap competition.

A high P score, particularly a solitary peak, or one shared with R (Social Reform), may represent particular concern to find a "relevant" ministry and imply some degree of alienation from the church's ministry as more traditionally encountered. As with R, P may be more concerned with serving people than with the church. As will be suggested below, the alienation does not seem so unbridgeable as may be the case with strong R motivation.

A low P score may represent a jealous guarding of more traditional definitions of ministry--analogous to and perhaps correlated with the protection of a special leading definition of the call. Or a low P score may mean that the student, typically coming from a restricted evangelical background, has not yet had occasion to consider such intensive pastoral care as a possible element or appeal of the ministry.

The potential discrepancy between P and more traditional conceptions of the church's ministry is suggested more markedly at schools tending to attract students representing the latter. P tends to be lower in the latter schools (see Appendix II).

The following correlations with P (RB 3:21) are generally strongest at Brite, Southern Baptist, and in some cases Union (and weaker or non-existent at the other schools in the sample, Drew, Colgate Rochester, United, and Yale).

P is negatively correlated (RB 3:21; also RB 1:1,2; RB 3:3,9,11,13) with definiteness of commitment, and with the more traditional conceptions of motivation implied by E (Evangelistic witness) and SL (Special Leading), and particularly with the vagueness, irrelevance, or selfishness of purpose he finds implied by F (Self-fulfillment). The higher P scorer is younger than the low scorer, more likely to be single, and is particularly self-confident about his own emotional health. He comes from a larger town, reports his father as inactive in the church and not influential in his own decision. He is not likely to have close friends entering the ministry. He is more likely to criticize his home and church religious training as inadequate. He is somewhat more likely to enter a more supporting or peripheral form of the ministry, rather than the parish ministry. During seminary, he may become more involved in clinical training.

In the Face-Impression study, again it was at the schools representing more conventional traditions that faculty ratings of quality of motivation or fitness for the ministry tended to be correlated negatively with P score (RB 2:7,8). P is loaded slightly on the "liberal" side of the "conservative-liberal" Factor 1 (RB 2:2). P tends to change during seminary as do "liberal" variables, i.e. increasing at schools which draw the most "conservative" students and decreasing at schools drawing more "liberal" students (RB 4:2).

P more likely than R to find comfortable niche in church traditions:

Although P does appear, like R (Social Reform), often to represent a reaction against what the student feels are traditional, irrelevant, or vague conceptions and purposes, the P scorer is much more likely than R to find the gulf bridged before he leaves seminary.

Unlike R, initial P is correlated with increase during seminary of D (Definiteness), E (Evangelistic witness), and F (Self-fulfillment), and not correlated with increase of I (Intellectual concern) (RB 4:10). Unlike R, P tends to choose field work in church positions (RB 3:4), and he tends to get more positive ratings from faculty members (RB 3:6), significantly so at Brite, Colgate Rochester, and Yale. Faculty judgments of potential effectiveness are also correlated with increase of P during seminary (RB 4:8), so that presumably the P scorer upon leaving seminary would be most strongly correlated with faculty ratings of effectiveness--although this has not been specifically tested.

Correspondingly, the more traditional student who enters seminary without feeling strong specific P motivation appears likely to acquire it comfortably during seminary. P is increased during seminary by the student who enters feeling very definite about his commitment, with many others from his home church also entering the ministry, whose father is a farmer and who himself would return to farming if he does not enter the ministry (RB 4:15).

Similarly, the student initially strong on intellectual interests who may be a bit aloof from pastoral involvement, tends to acquire more P motivation during seminary. Initial I scorers tend to acquire P motivation, and not the reverse as is true with R (RB 4:10). Initial I interest in the teaching ministry is correlated with increase in P during seminary by exactly the degree that it was correlated negatively with initial P (RB 4:15).

P motivation itself tends to be stable, showing the least change during seminary of any AIFLERP scales (RB 4:2).

Help others to "help self"?

The suspicion may commonly be raised about service motivations that persons may be attracted to help others by attempts to solve stressful situations in their own lives. At worst, this may be a kind of sublimated aggression by the distraught. At best, it may be regarded as a sensitization toward the predicaments of others by one's own experience.

The element of guaranteed closeness with others, which is involved in P motivation, might be an additional appeal for those with some past difficulty about achieving intimate personal relations.

These possibilities ought not to be overlooked in interpreting strong P motives. Neither ought they to be judged as invalidating it; experience of personal stress and turmoil may make a person an effective pastor at least as often as it may impede his pastoral ministry.

No data firmly relate to the above, but two findings appear to be interpretable only in terms suggested above. P motivation is correlated with having parents separated (RB 3:18). It is correlated negatively with the index of "insight" used in the Face Impression study (RB 2:6).

APPENDIX I - KEY TO ITEMS

APPENDIX II - NORMS

APPENDIX III - RELIABILITIES

APPENDIX IV - INTERCORRELATIONS AMONG SCALES

APPENDIX V - TWO "LOST SCALES"

APPENDIX I

List of items scored on each scale.

Key indicating proper scoring for each item number.

D (Definiteness)

58. My reason for coming to seminary:
 + A. Is to prepare for the ministry.
 - B. Is something of a trial to see if the ministry is where I belong.
62. The idea of entering some vocation other than the ministry:
 + A. Still has a strong appeal for me.
 - B. Has little or no appeal for me.
69. What I hope to do when I have finished seminary:
 - A. Depends on a number of unanswered questions I am still facing.
 + B. Seems quite clear to me.
76. For me to say that I can see God's leading in the various events that have resulted in my coming to seminary:
 - A. Would seem to me to be presumptuous.
 + B. Is a frank statement of my belief.
81. During my seminary years, if I could choose freely between jobs in which the remuneration was the same, I would choose:
 + A. To work in a church setting.
 - B. To widen my experience through secular employment.
97. My decision to enter the ministry:
 + A. Is now quite definite in my own mind.
 - B. Is still somewhat tentative in my own mind.

NL (Natural Leading)

60. Some people seem naturally "cut out" for the ministry as a kind of life they are apt to enjoy:
 - + A. I feel that I am one such person.
 - B. I may need to learn to adapt myself to the minister's life.
65. In regard to my decision to come to seminary and to enter the ministry:
 - A. I have undergone (or am undergoing) a prolonged struggle.
 - + B. My decision has been fairly easy and natural.
71. For me to say that I am well-equipped for the ministry because of my gifts and abilities:
 - A. Would seem to me to be presumptuous.
 - + B. Is a fair statement of the most objective appraisal I have been able to make.
75. After it had occurred to me that I should consider the ministry:
 - A. I had a difficult time "seeing" myself as a minister.
 - + B. I tended to like the idea of being a minister.
79. Asking other people to do things:
 - A. Is hard for me to do.
 - + B. Comes easily to me.
83. In assessing my own personal capabilities I think:
 - + A. I am best fitted for the ministry.
 - B. There are some other vocations in which I would do as well.
98. As I understand the responsibilities of the ministry:
 - + A. It will not be difficult for me to assume them.
 - B. Some aspects of this work will be difficult for me to perform.
111. I will work more effectively in a position:
 - + A. Which requires of me dynamic and persuasive leadership in promoting enthusiasm and enlisting people.
 - B. In which this is not one of the crucial demands determining my effectiveness.
113. I will work more effectively in a position:
 - + A. Which necessitates an exceptional skill on my part as a public speaker.
 - B. In which this is not one of the crucial demands determining my effectiveness.

SL (Special Leading)

56. In making my decision to enter the ministry:
 + A. I answered a "call" more compelling than any rational personal assessment.
 - B. I was guided by my abilities and my likes and dislikes.
63. In deciding to come to seminary and to enter the ministry:
 - A. I sought the help and counsel of many people.
 + B. I felt that this was a decision I had to reach through prayer, without outside influence.
66. My decision to enter the ministry:
 - A. Was a gradual one.
 + B. Came at a specific time in my life which I can remember well.
68. Apart from any conviction that God wants me in the ministry, if I were to pursue my own desires alone I would:
 + A. Probably choose another vocation.
 - B. Probably choose the ministry.
72. The ministry is sometimes considered to be one of a group of "helping" professions including teaching, social work, medicine, etc. My selection of the ministry:
 - A. Followed an interest in some other helping profession.
 + B. Was independent of any prior interest in the helping professions.
74. If the seminary should advise me to discontinue my preparation for the ministry, I feel I would probably:
 - A. Investigate some other type of work.
 + B. Persevere in my interest in the ministry.
78. The manner in which I feel God has led me into the ministry:
 + A. Transcends any other experiences I have had.
 - B. Has been entirely through normal human experiences.
82. I make basic decisions about my life:
 + A. Only as I feel sure it is God's will for me.
 - B. As I feel it will give me the greatest happiness and the greatest usefulness.
84. My concern for human needs, my faith in the Christian response, and my own desire and ability to be a minister:
 - A. Are central to my conviction that I am called to the ministry.
 + B. While important to me, are not in my case adequate enough reason for my entering the ministry.
96. When I made my decision to enter the ministry:
 + A. I had no personal choice--I felt this was something I had to do.
 - B. Of the other vocations open to me, this was what I wanted to do the most.
99. The appeal of the ministry as a kind of work that will give me enjoyment and satisfaction:
 - A. Is the basic motive underlying my interest in the ministry.
 + B. Has not figured greatly in my decision up to now.

CC (Concept of the Call)

101. It is my belief that God's call to the ministry:
 - A. More or less implies that a person wants to be a minister.
 - + B. Quite often extends to persons who at the time would prefer not to be ministers.
102. It is my belief that God's call to the ministry:
 - A. More or less implies that a person has the necessary intellectual qualifications.
 - + B. Quite often extends to persons of extremely modest ability through whom He can show His power.
103. In a major decision such as entering the ministry, it is my feeling:
 - + A. That God will reveal His will to us beyond any doubt.
 - B. That some doubt may still be present when God reveals His will to us.
104. When I speak of being "called" to the ministry, I am thinking:
 - + A. Of an unusual, mystical and supernatural kind of experience that separates a person to God's work.
 - B. Of a very natural experience, similar to what prompts a person to go into any vocation.
105. In deciding whether to accept a candidate for the ministry, a seminary should be more concerned about:
 - A. His abilities and qualifications.
 - + B. Whether he has a genuine call of God.
106. It seems to me that a person who is ordained without a distinct certainty of being called by God to the ministry:
 - + A. Commits a serious error--even a sin in some cases.
 - B. Is simply being honest with himself and can still be a good minister.
107. God's call to the ministry:
 - A. More or less implies that a person has desirable qualities of personality and leadership.
 - + B. Is without respect to persons--God will supply the qualifications.
108. If a person definitely wants to be a minister and can fulfill all the requirements of his denomination:
 - A. Then this itself constitutes the "call".
 - + B. The call is something else--he may not be called at all.
109. I think that a person should enter the ministry:
 - + A. Only if he is certain it is God's will.
 - B. If he is a sincere Christian, and thinks the ministry is where he can contribute most.
110. It is my feeling that:
 - A. A minister should periodically reconsider his vocational choice.
 - + B. The call of God is for a lifetime ministry.

FL (Flexibility)

57. The kinds of courses I enjoyed most in college are those in which:
- A. The basic content is fairly well defined.
+ B. Many of the answers are not yet in.
59. It is my opinion that:
+ A. Doubts are opportunities for creative thought.
- B. Christians should work toward overcoming their doubts.
61. The statement that agrees more closely with my own thinking about God is:
+ A. I form my ideas about God cautiously--there is much that I do not understand.
- B. I have the assurance of faith that what I believe about God is true.
64. In my dealings with people, I would:
+ A. Tell a lie if it will help someone in need.
- B. Always tell the truth.
67. I prefer a professor who:
- A. Tells us clearly what he wants us to learn.
+ B. Expects a lot of extra reading and independent studying.
70. I prefer plays or stories in which:
+ A. The conclusion is left to the reader's imagination.
- B. The ending is clear and complete.
73. In college, I usually selected friends and professors who:
- A. Shared my outlook and convictions.
+ B. Challenged my perspective and questioned my convictions.
77. When I consider God's unchangeableness and His constant creativity, the attribute which means more to me:
- A. Is His unchangeableness.
+ B. Is His constant creativity.
80. When attracted by ideas which could tend to undermine my faith:
+ A. I feel I must entertain them honestly, regardless of what might happen to my faith.
- B. I am careful not to become too involved in them.

A (Acceptance by others)In Items:

- | | |
|---|-------------------|
| 1. The church and the ministry were vital factors in the environment in which I grew up. | 131
143
151 |
| 2. People encouraged me and seemed to think of me as the kind of person who would be a good minister. | 121
135
155 |
| 3. My interest in the ministry found ready acceptance and support from my family and friends. | 123
141
146 |
| 4. I recognize that the influence of others contributed to my initial interest in the ministry. | 129
149
152 |

I (Intellectual Concern)

In items:

- | | |
|---|-------------------|
| 1. I recognized the church's need for a dedicated ministry based on sound Christian scholarship. | 125
131
140 |
| 2. I wished to relate the insights of Christian thinking to our understanding of other fields of knowledge. | 130
138
155 |
| 3. I felt an increasing interest in theological issues and wanted to explore them more deeply. | 126
136
141 |
| 4. I was attracted to the opportunities for continued study and intellectual growth which the ministry affords. | 132
144
149 |

F (Self-fulfillment)In items:

- | | |
|---|-------------------|
| 1. I felt I would be unhappy in any other vocation - the church offered me a sense of personal fulfillment. | 128
131
147 |
| 2. Entering the ministry was for me a decisive answer to the competing claims of Christ and the world upon my life. | 121
130
148 |
| 3. I had a feeling of unrest and dissatisfaction with myself until I decided for the ministry. | 133
136
146 |
| 4. I have come to see that my need to find myself helped determine my choice of the ministry. | 137
144
152 |

L (Leadership success)In items:

- | | |
|--|-------------------|
| 1. I felt my personality and abilities were well suited for the work of the church. | 125
128
143 |
| 2. The ministry appealed to me as the type of work I would both enjoy and do effectively. | 130
135
145 |
| 3. I found it rewarding to assume leadership and responsibility in church activities. | 123
136
153 |
| 4. From my contacts with successful ministers, I came to view the ministry as a stimulating, challenging vocation. | 129
132
137 |

E (Evangelistic witness)In items:

1. I wanted to advance the church's redemptive outreach to mankind.	140 143 147
2. By becoming a minister, I could devote my full time to preaching the Gospel.	135 138 148
3. I wanted to witness to others about the eternal life Christ offers.	126 146 153
4. I saw the urgent need to lead people away from sin into a personal religious experience.	122 137 149

R (Social Reform)In items:

- | | |
|---|-------------------|
| 1. I wanted to bring the resources of the church to bear upon the problems of community living. | 125
147
151 |
| 2. To me the ministry seemed to afford opportunities for a creative stand in social issues. | 121
138
145 |
| 3. I felt that as a minister I could take effective action against the moral ills of our society. | 133
141
153 |
| 4. As a minister I would be in a position to do something about the world's suffering and need. | 122
132
152 |

P (Service to Persons)In items:

- | | |
|--|-------------------|
| 1. I wanted to share in the church's contribution to people's emotional health and maturity. | 128
140
151 |
| 2. Entering the ministry was an outgrowth of my interest in people and my apparent ability to help them. | 145
148
155 |
| 3. As a minister I could counsel with individuals at the deepest levels of their self-understanding and religious development. | 123
126
133 |
| 4. I felt I could give support to persons who were adjusting to the crises, sorrows, and demands of everyday living. | 122
129
144 |

KEY FOR SCORED ITEMS

Section II scales

56a SL	65b NL	74b SL	83a NL	104a CC
57b FL	66b SL	75b NL	84b SL	105b CC
58a D	67b FL	76b D	96a SL	106a CC
59a FL	68a SL	77b FL	97a D	197b CC
60a NL	69b D	78a SL	98a NL	108b CC
61a FL	70a FL	79b NL	99b SL	109a CC
62b D	71b NL	80a FL	101b CC	110b CC
63b SL	72b SL	81a D	102b CC	111a NL
64a FL	73b FL	82a SL	103a CC	113a NL

Notes:

1. Items are listed as scored positively on scales. The alternative response to each item--a or b-- is scored negatively on the same scale.
2. Items 85-95 are experimental items and are unscored.
3. Items 111 and 113 are Section III items scored on the NL scale.

Section IV scales

121 A R	130 A I	138 A E	147 A E
121 B A	130 B F	138 B R	147 B F
121 C F	130 C L	138 C I	147 C R
122 A R	131 A A	140 A E	148 A F
122 B P	131 B I	140 B I	148 B P
122 C E	131 C F	140 C P	148 C E
123 A P	132 A I	141 A I	149 A E
123 B A	132 B R	141 B R	149 B A
123 C L	132 C L	141 C A	149 C I
125 A I	133 A R	143 A L	151 A P
125 B L	133 B F	143 B A	151 B R
125 C R	133 C P	143 C E	151 C A
126 A E	135 A A	144 A F	152 A A
126 B I	135 B L	144 B I	152 B R
126 C P	135 C E	144 C P	152 C F
128 A F	136 A I	145 A L	153 A L
128 B P	136 B L	145 B R	153 B R
128 C L	136 C F	145 C P	153 C E
129 A L	137 A L	146 A E	155 A I
129 B P	137 B E	146 B F	155 B P
129 C A	137 C F	146 C A	155 C A

Note:

Items 124, 127, 134, 139, 142, 150, and 154 are experimental and are unscored.

APPENDIX II

Table 1: Mean scores and standard deviations of TSI scores.

Table 2: Mean TSI scores for each school.

Figure 1: Profiles for male, female, and older male students.

Figure 2: Three blank profile forms.

Figure 3: Mean response to Section III items.

Figures 4-9: Profiles of denominational means.

Appendix II, Table 1: MEAN SCORES AND STANDARD DEVIATIONS OF TSI SCORES
(53 schools, 1963 administration)

	<u>Male theological students</u>		<u>Female theological students</u>		<u>Male theological students over 30 without previous experience in ministry</u>	
	(N=1775)		(N=210)		(N=321)	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
<u>D</u>	55.5	5.4	55.1	5.3	58.4	3.8
<u>NL</u>	50.2	6.9	49.3	6.6	49.6	6.8
<u>SL</u>	49.4	8.7	45.6	7.7	55.1	8.0
<u>CC</u>	49.9	7.9	48.9	7.9	54.2	7.8
<u>FL</u>	53.2	7.2	52.8	7.8	50.8	7.2
<u>A</u>	8.5	5.2	8.3	4.7	7.4	4.8
<u>I</u>	11.9	5.2	12.5	5.0	9.8	4.1
<u>F</u>	11.9	5.3	11.2	5.0	14.4	4.8
<u>L</u>	11.0	4.5	11.5	4.5	9.2	4.0
<u>E</u>	14.4	6.5	13.2	5.9	16.4	5.4
<u>R</u>	11.3	4.4	11.1	4.3	11.2	4.2
<u>P</u>	14.6	4.2	15.7	4.1	14.6	4.2

Appendix II, Table 2: MEAN TSI SCORES FOR EACH SCHOOL

	<u>N</u>	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
Anderson Coll. and Theol. Sem.	13	57.0	53.9	51.7	53.4	50.4	8.5	10.5	12.2	10.9	15.9	11.8	14.2
Austin Presbyterian Theol. Sem.	61	55.8	48.8	51.6	51.3	55.4	8.4	12.4	12.3	11.5	14.3	10.2	14.3
Bethel Theol. Sem.	18	55.3	49.6	53.9	55.5	45.6	9.2	10.1	11.3	10.9	19.2	8.9	14.4
Bethany Biblical Sem.	16	51.9	48.6	47.4	45.4	52.2	8.1	13.4	9.8	12.0	13.8	12.3	14.3
Boston Univ. School of Theol.	50	55.2	52.2	44.7	45.5	56.2	7.5	13.6	10.1	12.2	10.9	13.2	16.5
Brite Coll. of the Bible	36	57.4	55.2	46.8	47.6	54.6	8.2	11.2	11.7	11.8	13.5	11.2	16.5
California Baptist Theol. Sem.	19	55.0	52.7	51.7	54.5	50.2	6.5	12.0	12.8	11.2	17.4	8.8	14.8
Central Baptist Theol. Sem.	18	57.7	48.6	55.8	54.1	49.4	10.0	9.6	14.7	11.1	15.8	9.9	12.9
Central Theol. Sem.	13	55.8	49.3	48.8	50.0	52.3	8.4	12.6	11.4	10.8	14.9	9.6	16.2
Christian Theol. Sem.	33	57.4	51.2	49.7	51.6	51.5	9.2	9.8	12.9	11.2	15.7	11.3	13.7
Colgate Rochester Div. School	36	52.6	47.2	47.5	46.3	59.6	8.0	14.7	11.3	11.3	9.6	11.9	16.3
College of the Bible	21	55.8	51.3	41.2	42.0	57.2	10.6	12.4	9.3	14.4	9.1	12.4	15.2
Concordia Sem.	125	55.4	49.2	48.9	47.6	46.9	10.8	10.9	9.9	11.4	18.4	8.6	13.4
Conwell School of Theol., Temple Univ.	11	56.5	51.3	47.6	50.8	49.5	8.8	7.8	12.4	10.5	14.0	12.1	15.9
Div. School of Drake Univ.	27	55.3	48.9	45.0	45.3	54.8	9.2	12.0	10.9	12.5	12.4	12.3	14.4
Theological School, Drew Univ.	70	53.5	49.3	45.8	47.4	58.1	7.9	14.0	12.2	11.1	10.5	12.2	15.4
Divinity School of Duke Univ.	61	55.8	50.0	49.3	50.4	55.6	7.2	13.0	11.9	10.2	14.1	13.0	14.0
Eastern Baptist Theol. Sem.	21	57.9	51.7	52.9	54.9	49.7	9.3	10.2	14.6	11.4	16.0	11.1	13.0
Episcopal Theol. School	30	54.7	49.6	47.6	47.6	57.9	5.7	15.8	10.5	11.0	13.0	12.2	15.5
Evangelical Lutheran Theol. Sem.	32	53.5	47.5	49.3	48.0	51.8	7.9	11.4	12.3	11.2	15.2	9.5	15.5
Evangelical Theol. Sem.	37	55.4	50.6	51.8	52.7	51.1	9.5	10.1	14.2	10.0	15.1	11.8	13.3
Garrett Biblical Institute	81	55.0	50.7	49.7	50.1	54.2	8.0	12.0	11.2	11.0	14.5	12.0	15.1
Gettysburg Theol. Sem.	30	55.9	51.5	49.8	49.6	51.7	8.7	9.9	12.1	11.9	13.8	11.3	17.0
Golden Gate Baptist Theol. Sem.	21	58.5	51.5	60.4	57.2	48.6	7.4	9.1	13.3	9.1	20.4	11.1	13.5
Gordon Div. School	30	58.3	51.6	55.1	55.8	47.5	7.5	10.9	11.7	8.5	20.8	10.9	13.4
Goshen College Biblical Sem.	9	54.3	48.1	49.2	49.9	50.4	8.2	11.3	10.4	10.6	15.7	11.9	13.1
Graduate Sem., Phillips Univ.	18	57.3	52.4	48.4	47.7	52.7	10.4	10.4	11.6	11.0	13.9	10.9	15.7
Hamma Div. School	31	56.8	50.9	50.3	52.1	52.5	8.8	10.5	13.4	12.0	16.2	9.3	13.5
Hood Theol. Sem.	8	57.3	51.6	49.6	50.1	52.1	6.8	11.4	12.3	12.5	13.6	12.4	15.5
Interdenominational Theol. Center	28	56.5	52.9	51.2	52.0	52.0	9.0	12.0	13.0	10.4	15.1	11.6	12.9

(Appendix II, Table 2 continued)

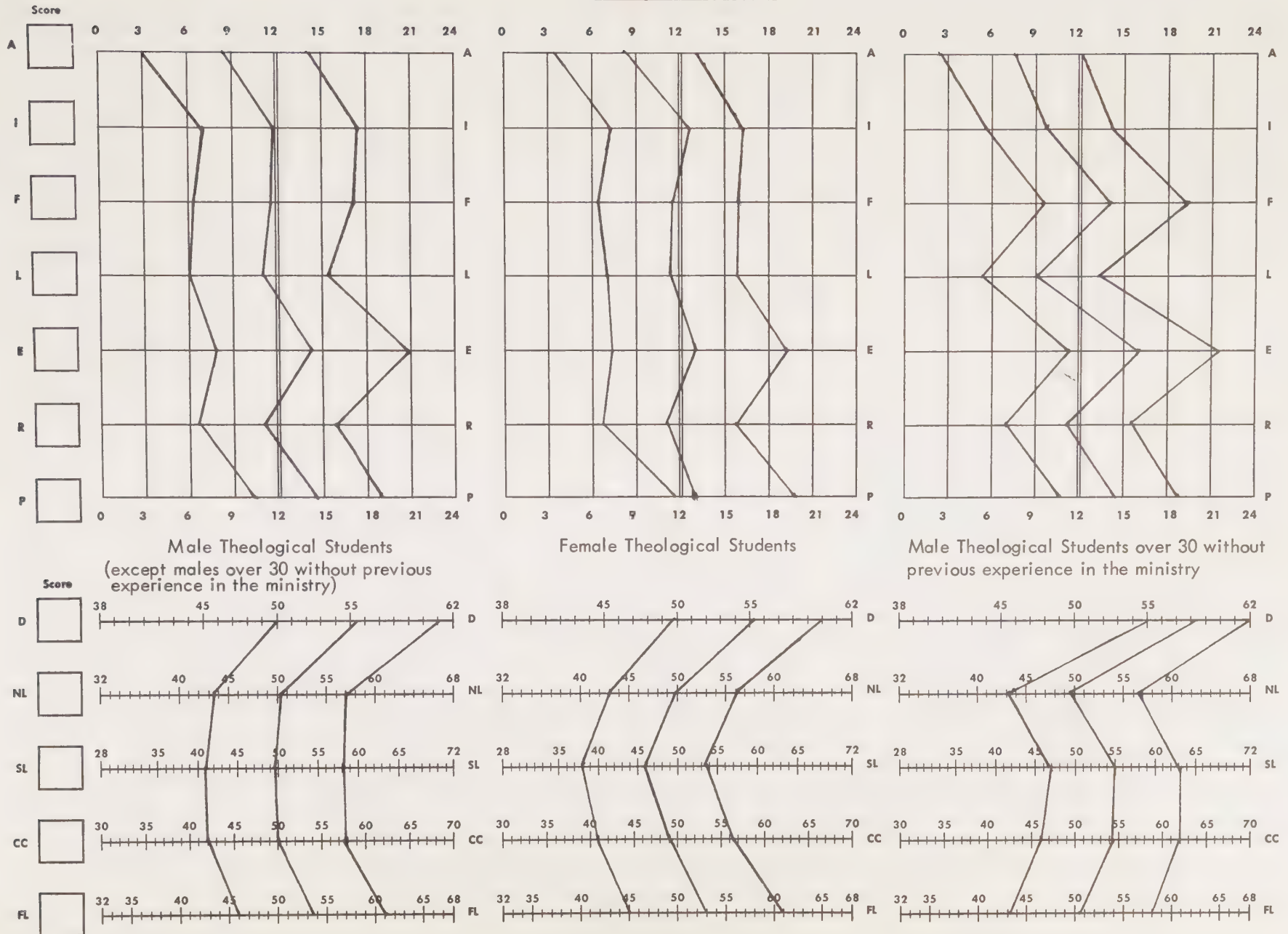
	<u>N</u>	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
Lancaster Theol. Sem.	22	55.7	48.5	47.8	48.3	52.1	7.4	14.2	11.7	11.9	12.7	11.9	14.2
Luther Seminary	11	57.0	50.7	52.5	54.9	47.5	10.1	8.5	11.6	10.5	18.4	10.8	14.1
Lutheran School of Theol., Chicago	30	54.4	49.3	46.5	49.9	52.9	11.1	10.8	12.4	11.9	12.6	10.7	14.5
Lutheran Theol. Sem., Southern	2	61.0	44.5	49.5	47.0	49.0	6.5	16.0	17.0	12.0	11.5	6.0	15.0
McCormick Theol. Sem.	43	55.1	50.2	46.1	47.4	57.9	8.9	11.0	11.7	11.0	12.3	12.3	16.2
Maywood Theol. Sem.	17	54.5	46.4	47.9	44.4	56.3	9.4	10.9	11.4	11.8	13.5	11.1	15.8
Methodist School in Ohio	41	56.3	50.7	49.6	50.2	53.9	8.2	10.7	13.2	11.0	13.8	13.1	14.7
Moravian Theol. Sem.	7	55.7	46.3	55.4	54.1	51.9	6.6	11.4	15.1	7.7	15.0	11.4	16.6
New Brunswick Theol. Sem.	11	57.0	49.4	48.2	47.0	56.5	5.0	11.0	12.9	12.3	15.4	12.3	15.1
North Park Coll. and Theol. Sem.	13	56.8	48.0	50.4	50.4	48.6	10.5	10.2	14.3	8.2	18.2	7.8	14.2
Northern Baptist Theol. Sem.	11	59.5	51.2	55.7	58.0	44.7	6.4	10.0	10.7	9.9	22.0	10.8	13.7
Northwestern Lutheran Theol. Sem	31	56.5	51.8	48.9	50.4	52.5	8.2	10.5	11.6	12.0	16.0	9.9	14.7
Pacific Lutheran Theol. Sem.	18	53.3	47.4	48.4	46.0	56.8	9.6	12.7	13.3	10.5	13.8	9.6	14.6
Pacific School of Religion	20	52.9	51.6	44.3	42.6	58.0	7.5	13.3	11.2	10.7	10.7	12.7	18.0
Philadelphia Theol. Sem.	53	55.2	50.6	46.5	46.2	54.5	8.4	11.3	10.4	12.1	14.5	10.8	16.1
School of Theol., Univ. of the South	11	55.1	47.6	47.6	51.8	56.8	8.0	11.5	14.7	11.9	12.2	9.6	14.9
Seabury-Western Theol. Sem.	29	55.6	49.7	48.6	52.3	51.7	8.9	12.8	12.2	11.9	12.4	10.6	15.0
Southern Baptist Theol. Sem.	176	57.7	52.1	55.1	56.9	50.3	7.9	10.9	13.2	9.2	18.3	10.8	13.4
Union Theol. Sem. in Virginia	49	54.5	48.4	48.1	49.9	54.5	8.8	12.9	12.9	11.8	12.2	11.2	14.0
United Theol. Sem.	43	56.8	49.7	51.8	49.9	53.3	9.2	9.5	13.7	10.5	14.7	12.0	14.2
Vanderbilt Div. School	34	52.8	49.0	47.1	46.4	57.2	9.2	13.1	11.1	12.7	10.5	11.2	14.6
Waterloo Theol. Sem.	3	58.0	55.0	56.3	46.7	55.7	4.3	8.3	7.7	12.7	20.0	13.0	18.0
Yale Univ. Div. School	96	52.0	49.1	44.2	45.2	58.9	8.7	16.5	9.5	11.2	8.5	14.0	15.4

Note to Figures 1 and 2:

Figure 1 presents in graphic form the data presented in Table 1, the means and standard deviations for three general reference groups. These figures are also available from the Ministry Studies Board drawn on clear plastic, so that they may be laid over a student's profile, for comparison.

To emphasize the importance of comparing a student's scores with his own reference group, Figure 2 is provided--three blank profile forms so that test users may draw reference profiles for their own groups. A profile of means may be drawn, then cut along the profile to provide a model for tracing the local norms onto each student's profile. Or, perhaps more suitably, the ranges of one standard deviation may be drawn and cut out, so that the limits of one standard deviation may be easily traced onto each student's answer sheet. Clear plastic is available from the Ministry Studies Board, on which norms may be drawn and which may then be laid on each student's answer sheet for comparison.

Appendix II, Figure 1



Appendix II, Figure 2



Appendix II, Figure II-3: MEAN RESPONSE TO SECTION III ITEMS

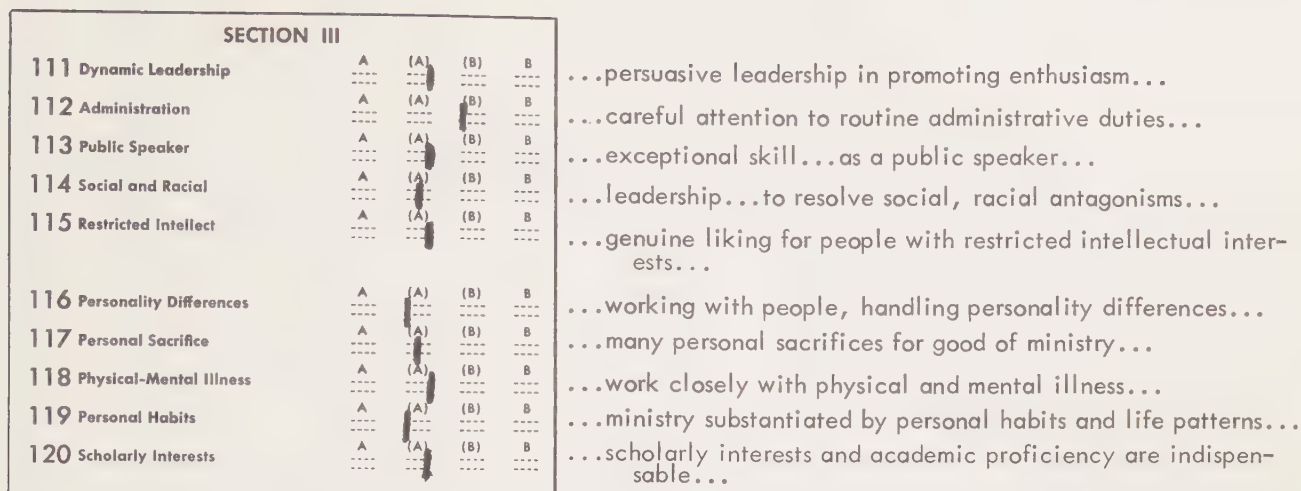


Figure 3 represents the average response to Section III items made by 2392 students entering 53 different seminaries in 1962.

Students make their response to these items by choosing one of four response forms:

- Blackening two marks under A--indicating great confidence about meeting the demand.
- Blackening one mark under A--indicating moderate confidence about meeting the demand.
- Blackening one mark under B--indicating moderate discomfort about meeting the demand.
- Blackening two marks under B--indicating greater discomfort about meeting the demand.

To represent their average responses, Figure 3 uses the range of the answer space as a single scale and indicates graphically the average degree to which the responses are toward the A or B sides.

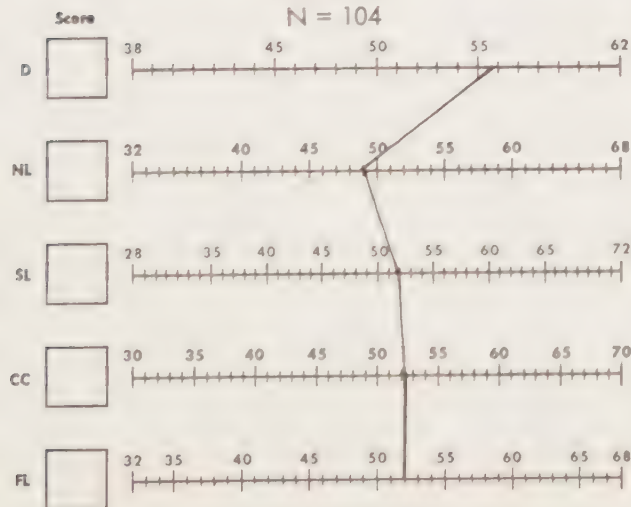
Item #112 is the only item which theological students, on the average, answer on the discomfort side, although #118 averages near the mid-point, answered almost equally between the comfort and discomfort.

In the figure, the phrases at the left are as they appear on the answer sheet. On the right are fuller extracts from the items in the test booklet. Note that the abbreviated phrases on the answer sheet may be slightly misleading for some items, such as #115, and #116, unless one is familiar with the actual item.

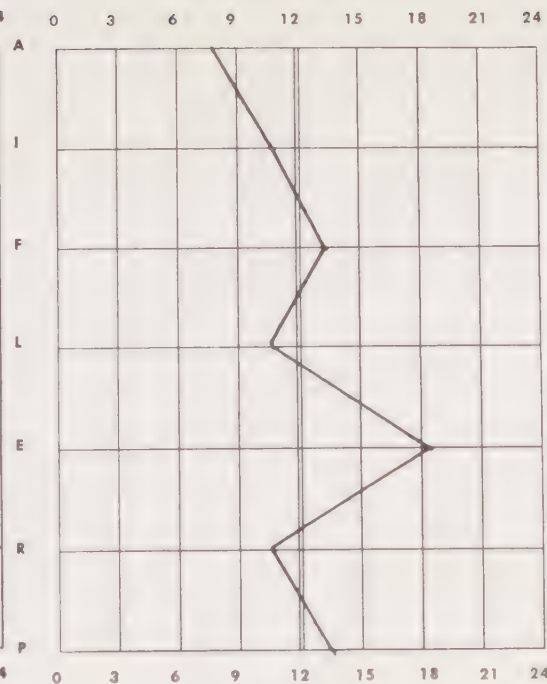
Appendix II, Figure 4



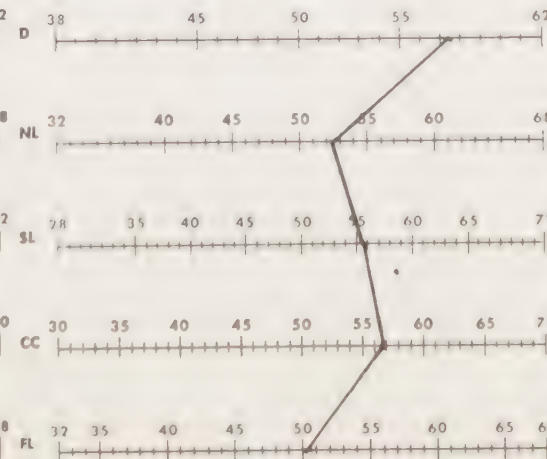
American Baptist
5 schools
N = 104



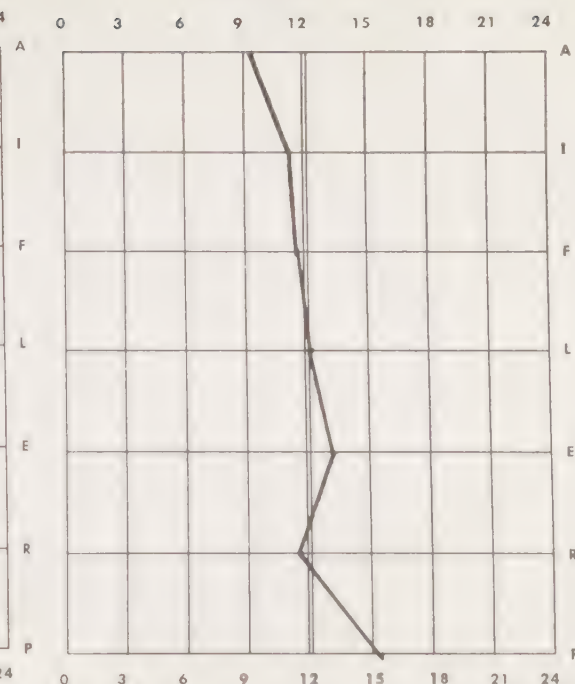
Appendix II, Figure 5



Southern Baptist
3 schools
N = 216



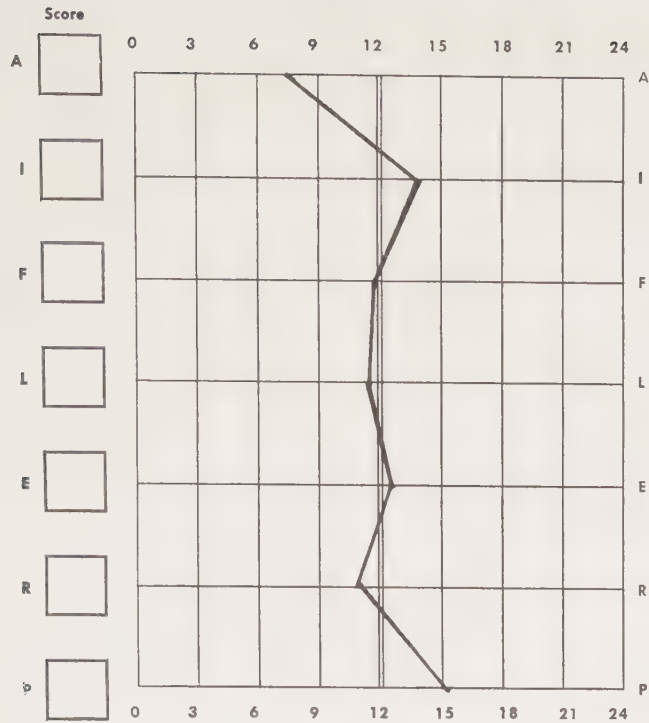
Appendix II, Figure 6



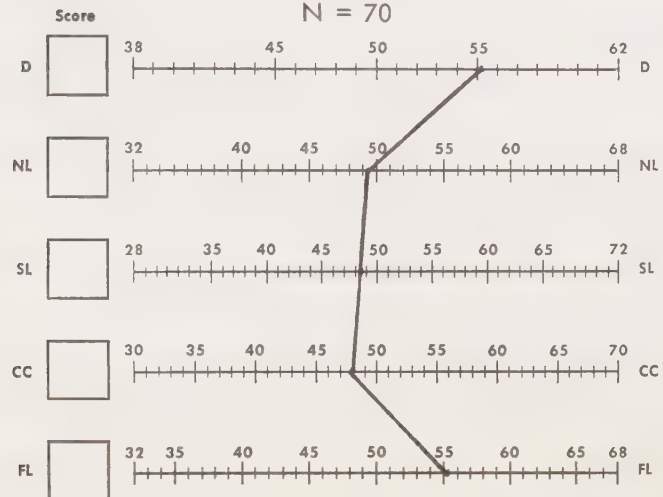
Disciples of Christ
5 Schools
N = 135



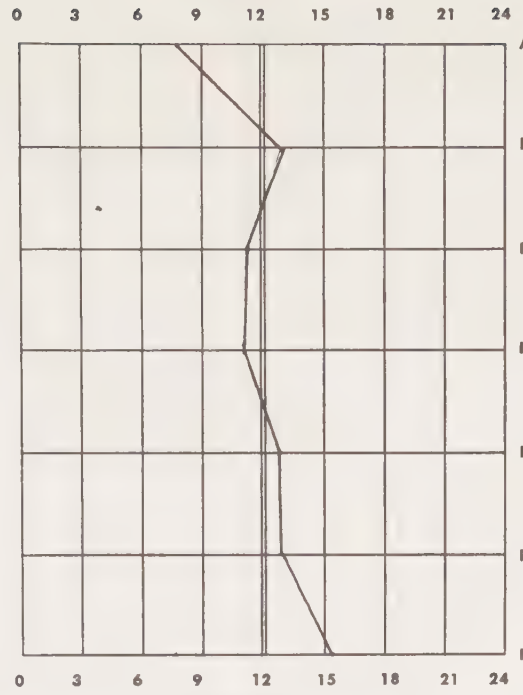
Appendix II, Figure 7



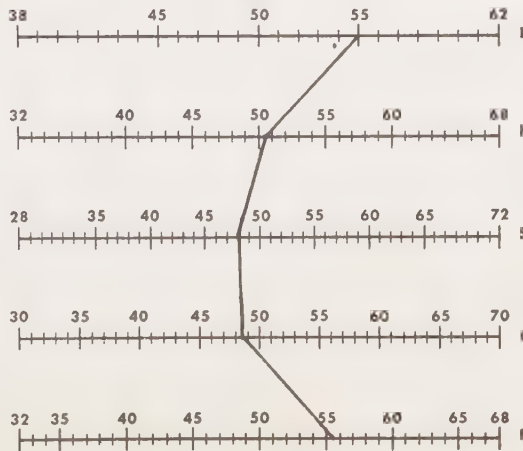
Episcopal
3 Schools
N = 70



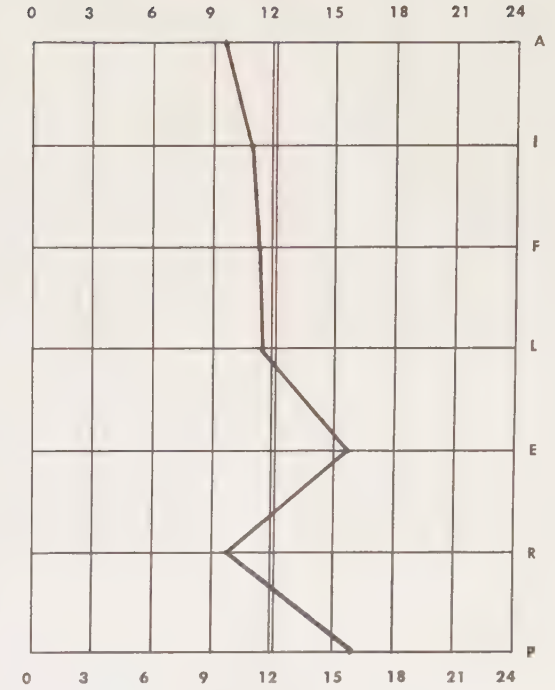
Appendix II, Figure 8



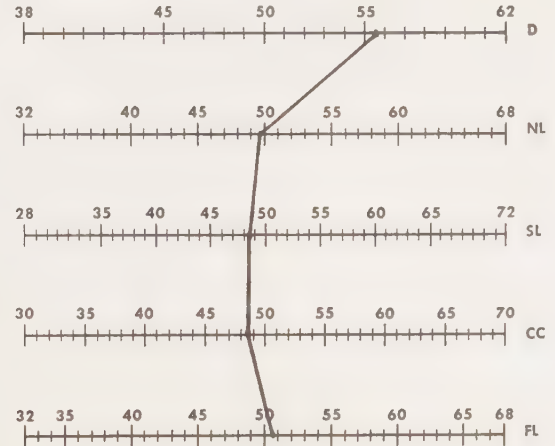
Methodist
6 schools
N = 303



Appendix II, Figure 9



Lutheran
11 Schools
N = 376



APPENDIX III

Evidence of Reliability

Inter-item correlations for each scale.

APPENDIX III: RELIABILITIES

Reliability of the TSI scales has been assessed by correlation among the items within each scale. Tables 2 to 6 present the inter-item tetrachoric correlations for the five Section II scales. Tables 7 to 13 present inter-item product-moment correlations for the seven scales of Section IV. Table 1 presents the summary correlation for each scale. These correlations are derived from 440 students entering 23 seminaries in 1959 who took Form B, scored as Form C. Item numbers are given as in Form C. The full items are presented in Appendix I.

Appendix III, Table 1: SUMMARY OF INTER-ITEM CORRELATIONS FOR EACH SCALE*

<u>Scale</u>	<u>r *</u>
<u>D</u> Definiteness	.86
<u>NL</u> Natural Leading	.76
<u>SL</u> Special Leading	.84
<u>CC</u> Concept of the Call	.85
<u>FL</u> Flexibility	.79
<u>A</u> Acceptance by others	.63
<u>I</u> Intellectual concern	.68
<u>F</u> Self-fulfillment	.59
<u>L</u> Leadership success	.62
<u>E</u> Evangelistic Witness	.86
<u>R</u> Social Reform	.59
<u>P</u> Service to Persons	.58

* The summary correlations presented in this table are averages of the inter-item correlations presented in the following tables. The summary correlation is calculated from the following formula:

$$\text{Summary } r = \frac{\frac{2 \sum r}{K-1}}{\frac{2 \sum r}{K} + 1}$$

where K = the number of items in the scale, and $\sum r$ = the sum of all the correlations shown in the table

Appendix III, Table 2: D Scale (DEFINITENESS) -- INTER-ITEM CORRELATIONS

<u>Item #</u>	62	69	76	81	97
58	.67	.63	.40	.75	.90
62		.39	.15	.44	.69
69			.19	.24	.62
76				.45	.39
81					.49

Appendix III, Table 3: NL SCALE (NATURAL LEADING) -- INTER-ITEM CORRELATIONS

Item #	65	71	75	79	83	98	111	113
60	.19	.21	.32	.26	.37	.20	.16	.35
65		.12	.53	.12	.06	.25	.34	.16
71			.40	.30	.12	.27	.23	.20
75				.24	.30	.24	.26	.26
79					.22	.33	.52	.20
83						.23	.24	.22
98							.32	.25
111								.40

Appendix III, Table 4: SL SCALE (SPECIAL LEADING) -- INTER-ITEM CORRELATIONS

[illegible]

Appendix III, Table 5: CC SCALE (CONCEPT OF THE CALL) -- INTER-ITEM CORRELATIONS

<u>Item #</u>	102	103	104	105	106	107	108	109	110
101	.32	.05	.35	.53	.19	.39	.32	.28	.19
102		.22	.25	.56	.06	.39	.31	.22	.27
103			.39	.36	.46	-.05	.25	.49	.57
104				.51	.50	.33	.46	.58	.35
105					.49	.50	.39	.45	.43
106						.14	.29	.59	.47
107							.20	.25	.31
108								.54	.34
109									.48

Appendix III, Table 6: FL SCALE (FLEXIBILITY) -- INTER-ITEM CORRELATIONS

<u>Item #</u>	59	61	64	67	70	73	77	80
57	.40	.15	.27	.46	.32	.31	.18	.24
59		.33	.35	.33	.27	.29	.34	.47
61			.21	.22	.10	.34	.28	.44
64				.23	.09	.17	.31	.49
67					.31	.32	.09	.27
70						.44	.19	.20
73							.28	.37
77								.42

Appendix III, Table 7: A SCALE (ACCEPTANCE BY OTHERS) -- INTER-ITEM CORRELATIONS

<u>Item #</u> *	2	3	4
1	.25	.35	.27
2		.43	.34
3			.29

* In Tables 7 to 13, the item number is that assigned in Appendix I, rather than the item numbers in the test booklet, since each scale item appears in several test items in Section IV.

Appendix III, Table 8: I SCALE (INTELLECTUAL CONCERN) -- INTER-ITEM CORRELATIONS

<u>Item #</u>	2	3	4
1	.23	.29	.33
2		.39	.40
3			.49

Appendix III, Table 9: F SCALE (SELF-FULFILLMENT) -- INTER-ITEM CORRELATIONS

<u>Item #</u>	2	3	4
1	.19	.40	.34
2		.32	.21
3			.24

Appendix III, Table 10: L SCALE (LEADERSHIP SUCCESS) -- INTER-ITEM CORRELATIONS

<u>Item #</u>	2	3	4
1	.44	.24	.27
2		.24	.28
3			.25

Appendix III, Table 11: E SCALE (EVANGELISTIC WITNESS) -- INTER-ITEM CORRELATIONS

<u>Item #</u>	2	3	4
1	.60	.68	.59
2		.61	.55
3			.58

Appendix III, Table 12: R SCALE (SOCIAL REFORM) -- INTER-ITEM CORRELATIONS

<u>Item #</u>	2	3	4
1	.25	.21	.11
2		.34	.27
3			.37

Appendix III, Table 13: P SCALE (SERVICE TO PERSONS) -- INTER-ITEM CORRELATIONS

<u>Item #</u>	2	3	4
1	.20	.33	.31
2		.25	.17
3			.32

APPENDIX IV

Intercorrelation of TSI scores.

Appendix IV, Table 1: INTERCORRELATION OF TSI SCORES (THREE SAMPLES)

	<u>NL</u>	<u>SL</u>	<u>SL</u>	<u>CC</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>D</u>	.40 .26 .34	.32 .34 .39	.34 .30 .42	-.19 -.26 -.28	-.03 -.08 -.05	-.35 -.32 -.37	.27 .29 .30	-.11 -.10 -.18	.36 .34 .40	-.23 -.18 -.07	-.18 -.17 -.19
<u>NL</u>		.00 -.09 -.03	.07 -.07 .09	-.10 -.08 -.14	-.07 .02 .05	-.16 -.20 -.19	-.07 .00 -.04	.15 .25 .18	.22 .08 .12	-.13 -.17 -.11	-.05 -.01 -.05
<u>SL</u>			.66 .62 .63	-.28 -.16 -.30	-.11 -.13 -.17	-.30 -.18 -.32	.46 .35 .47	-.50 -.45 -.48	.53 .41 .53	-.11 .02 -.02	-.28 -.18 -.19
<u>CC</u>				-.41 -.37 -.47	-.10 -.08 -.10	-.34 -.17 -.40	.47 .37 .41	-.49 -.44 -.43	.57 .47 .60	-.24 -.11 -.11	-.28 -.22 -.20
<u>FL</u>					-.23 -.12 -.16	.39 .39 .40	-.22 -.13 -.22	.10 -.05 .07	-.36 -.30 -.40	.33 .23 .24	.19 .19 .22
<u>A</u>						-.18 -.11 -.09	-.18 -.26 -.20	.28 .28 .28	-.23 -.25 -.22	-.29 -.26 -.35	-.17 -.21 -.21
<u>I</u>							-.27 -.32 -.35	.08 -.16 .09	-.50 -.33 -.52	.02 .06 .00	.03 .00 -.01
<u>F</u>								-.37 -.17 -.29	.28 .17 .27	-.24 -.24 -.21	-.43 -.28 -.35
<u>L</u>									-.52 -.48 -.51	-.10 -.31 -.30	-.02 -.02 -.02
<u>E</u>										-.24 -.14 -.06	-.31 -.32 -.33
<u>R</u>											.18 .10 .12

Intercorrelations are reported above, based on three samples. In each cell:

--the first line is based on 220 subjects, 10 randomly selected from 22 schools in 1959 sample (Cf. RB # 1)

--the second line is based on 272 subjects, between 12 and 18 randomly selected from 18 schools in 1961 sample (Cf. RB # 2)

--the third line is based on 497 subjects, all of the students in seven schools selected from 1959 sample:

Brite, Colgate Rochester, Drew, Southern Baptist, Union (Virginia), United (Dayton), Yale. (Cf RB # 3)

It should be noted that in the correlations below the broken line, the ipsative (forced choice) nature of Section IV would produce intercorrelations of -.18, if scales were in fact unrelated. This figure, not .00, should be regarded as a base line in interpreting the magnitude of the relations.

APPENDIX V

Two "lost scales"

As explained in Sections 1 and 3 of the Manual, the scales of the TSI represent nearly the complete range of expressions of motivation which were made by a sample of ministers responding to an open-ended request to discuss their motivation. The ministers' replies were content-analyzed into categories which became the TSI scales. Two of the scales thus generated and intended for Section IV proved to have inadequate reliability and were discarded. The intended items of the scales did not correlate substantially with each other, nor were they all clearly distinct from items intended for other scales.

The TSI, then, fails to represent two aspects of motivation for the ministry which were once identified in spontaneous comments by ministers. However, the abandonment of these scales, instead of attempting to rewrite the items, implies the conclusion of the test-developers that it was an error in the original content analysis to suppose that these were discrete categories. Much of what was intended in the "image" scale items (see below) is apparently already represented in the F (Self-fulfillment) scale; and the intended "fellowship" items probably are already covered by items in the A (Acceptance by others), L (Leadership success) and P (Service to persons) scales.

However, the possibility remains that these original categories are important aspects of motivation which ought to be considered alongside the remaining seven AIFLERP scales of Section IV. To make them available, the categories are described below, giving the following information: (1) the conceptual definition developed at the time of the content analysis of spontaneous statements and the writing of Form A of the TSI; (2) selections from the statements which were used to illustrate the category (with underlining added to focus on the aspect of the excerpt that brings the concept); and (3) the intended, but unsuccessful, items.

THE IMAGE OF THE CHURCH'S MINISTRY

Definition: The ministry and the Church as an institution are held in great respect and even awe. They occupy a "hero" role, and create a wish to identify with this image. The need to build and maintain the church and its ministry.

Excerpts:

I feel that my father's influence as a community leader (a pastor) impressed me. At an early age I felt drawn toward the kind of life which would give me the opportunity to serve in this type of leadership. Also my contact with other ministers was encouraging and I met many whom I would have liked to be like.

There were, no doubt, selfish reasons for my choice - admiration of my former pastor, and wanting to be like him.

(Possibly) I entered the ministry because I could get recognition in church organizations I could not obtain elsewhere.

The ministry in my way of thinking was the most permanent profession in the world. Its fruits would last forever.

The great dream I had of the ministry is being fulfilled each day.

I had been influenced in that direction by an outstanding minister, but held off from it because I felt I wanted to be as good as he was.

But the desire to be a minister and thus a better, more heroic Christian prevailed. Also ... maintenance of status if I should become a minister.

The minister and the doctor were the people in the community.

No other vocation appealed with quite the intensity of the ministry. My grandfather had rendered a very effective and dedicated ministry and my early years following him around in his pastoral work made a deep impression on me. A close friend of mine made the decision a short time before and he held a great deal of respect from me ... a desire to copy my friend - also, I always wanted to be an imitator of my grandfather.

I believe now that the really "Christian" down to earth type of man our pastor was helped me to reach my decision. He was more or less my hero.

To me there is still no more important and eternally meaningful work in this world than the holy ministry.

I also had a deep respect for my home church and the Church in general.

Early in my childhood I played as the minister.

The things that stand out in my memory were the minister standing at the center of attention. Somehow his position seemed important. It seemed a desirable thing to do to lead the worship service and preach the sermon.

Our church was nearly 75 years old, and had not sent anyone out into the Gospel ministry.

I greatly admired the ministers of our home church, and somehow sensed that my role in life would be to do their type of work.

(The Image of the Church's Ministry, continued)

Items:

My love and reverence for the Church made me want to dedicate my life to its service.

I had great admiration for certain ministers and for the good they were accomplishing.

I regarded the ministry as the most significant vocation - I could ask no greater privilege than to belong to it.

THE FELLOWSHIP OF THE CHURCH

Definition: Rewarding experiences in the Church give a sense of "at-homeness." Activity in youth groups, and a love for the life and ideals of the Church provide a feeling of protection and security which will continue in the ministry.

Excerpts:

I felt from all relationships with ministers, Church School teachers, and the people of the Church that the Church was a place where happy people were found and that the minister was the director of these blessed people.

I had a grand experience in the Church through my childhood and youth.

(Among the) major experiences that entered into my decision: a Junior Church experience which made me aware of God and helped me to lead in services.

My "call" came as a result of experience in the Church - as a pupil in Church School, a teacher, a leader in youth groups.

To keep on the straight and narrow way, I sought the cloak of religion. I held the "rowdy" and immoral fellows away from me by telling them I was going into the ministry. I started for the ministry. To quit would have meant a great personal defeat. To have failed would have meant a complete mental breakdown.

I would recognize the influence of my family and the Church in nurturing me toward the point of decision.

A very gradual (decision), related to and growing from my childhood and youth lived in the Church. I thought I should be a minister because I was at home in the Church and had the necessary qualifications. A great deal of the inspiration grew out of Youth Fellowship experiences. I did not object to being "on God's side" or working for him.

Basic shyness and feelings of inadequacy were the next hurdles to overcome. Also, I am sure that I felt a security in employment prospects.

I grew up in a minister's home, grew to like my father's work, learned to love the Church and the ministers and the people whom I came to know through the Church. Summer camps and conferences led me to decide.

I always had a particular liking for the Church. The last years of high school were particularly enjoyable in that I had a wonderful experience as president of a youth group.

The call to the ministry was inspired by a very happy relationship in youth work in my church with a fine pastor. It was strengthened by church camp experience.

The decision was influenced by my extremely satisfying local Church experience reinforced by an enlightened college program.

Through Church and Bible class, I found within me a growing personal devotion to God and desire to serve Him in bringing the Gospel to men.

I had, through youth work, decided on a service career.

(The Fellowship of the Church, continued)

Items:

I knew how much people needed the love and mutual concern found in the fellowship of the Church.

Many of the most meaningful experiences of my life have been as a participant in church groups and activities.

I wanted to work among Christian people with Christian ideals and purposes.

CUT ALONG THIS LINE TO REMOVE

Duplicate, Figure 2, Appendix II, Page 6.

Score		0	3	6	9	12	15	18	21	24
A	<input type="text"/>									
I	<input type="text"/>									
F	<input type="text"/>									
L	<input type="text"/>									
E	<input type="text"/>									
R	<input type="text"/>									
P	<input type="text"/>									

Score		38	45	50	55	62
D	<input type="text"/>					
NL	<input type="text"/>					
SL	<input type="text"/>					
CC	<input type="text"/>					
FL	<input type="text"/>					

APPENDIX II
TO
VOCATIONAL
GUIDANCE
OF
THEOLOGICAL
STUDENTS
•
A
MANUAL
FOR THE USE
OF THE
THEOLOGICAL
SCHOOL
INVENTORY

A LIST OF ITEMS USED IN THE
theological school inventory



APPENDIX I

List of items scored on each scale.

Key indicating proper scoring for each item number.

D (Definiteness)

58. My reason for coming to seminary:
+ A. Is to prepare for the ministry.
- B. Is something of a trial to see if the ministry is where I belong.
62. The idea of entering some vocation other than the ministry:
+ A. Still has a strong appeal for me.
- B. Has little or no appeal for me.
69. What I hope to do when I have finished seminary:
- A. Depends on a number of unanswered questions I am still facing.
+ B. Seems quite clear to me.
76. For me to say that I can see God's leading in the various events that have resulted in my coming to seminary:
- A. Would seem to me to be presumptuous.
+ B. Is a frank statement of my belief.
81. During my seminary years, if I could choose freely between jobs in which the remuneration was the same, I would choose:
+ A. To work in a church setting.
- B. To widen my experience through secular employment.
97. My decision to enter the ministry:
+ A. Is now quite definite in my own mind.
- B. Is still somewhat tentative in my own mind.

NL (Natural Leading)

60. Some people seem naturally "cut out" for the ministry as a kind of life they are apt to enjoy:
 - + A. I feel that I am one such person.
 - B. I may need to learn to adapt myself to the minister's life.
65. In regard to my decision to come to seminary and to enter the ministry:
 - A. I have undergone (or am undergoing) a prolonged struggle.
 - + B. My decision has been fairly easy and natural.
71. For me to say that I am well-equipped for the ministry because of my gifts and abilities:
 - A. Would seem to me to be presumptuous.
 - + B. Is a fair statement of the most objective appraisal I have been able to make.
75. After it had occurred to me that I should consider the ministry:
 - A. I had a difficult time "seeing" myself as a minister.
 - + B. I tended to like the idea of being a minister.
79. Asking other people to do things:
 - A. Is hard for me to do.
 - + B. Comes easily to me.
83. In assessing my own personal capabilities I think:
 - + A. I am best fitted for the ministry.
 - B. There are some other vocations in which I would do as well.
98. As I understand the responsibilities of the ministry:
 - + A. It will not be difficult for me to assume them.
 - B. Some aspects of this work will be difficult for me to perform.
111. I will work more effectively in a position:
 - + A. Which requires of me dynamic and persuasive leadership in promoting enthusiasm and enlisting people.
 - B. In which this is not one of the crucial demands determining my effectiveness.
113. I will work more effectively in a position:
 - + A. Which necessitates an exceptional skill on my part as a public speaker.
 - B. In which this is not one of the crucial demands determining my effectiveness.

SL (Special Leading)

56. In making my decision to enter the ministry:
 - + A. I answered a "call" more compelling than any rational personal assessment.
 - B. I was guided by my abilities and my likes and dislikes.
63. In deciding to come to seminary and to enter the ministry:
 - A. I sought the help and counsel of many people.
 - + B. I felt that this was a decision I had to reach through prayer, without outside influence.
66. My decision to enter the ministry:
 - A. Was a gradual one.
 - + B. Came at a specific time in my life which I can remember well.
68. Apart from any conviction that God wants me in the ministry, if I were to pursue my own desires alone I would:
 - + A. Probably choose another vocation.
 - B. Probably choose the ministry.
72. The ministry is sometimes considered to be one of a group of "helping" professions including teaching, social work, medicine, etc. My selection of the ministry:
 - A. Followed an interest in some other helping profession.
 - + B. Was independent of any prior interest in the helping professions.
74. If the seminary should advise me to discontinue my preparation for the ministry, I feel I would probably:
 - A. Investigate some other type of work.
 - + B. Persevere in my interest in the ministry.
78. The manner in which I feel God has led me into the ministry:
 - + A. Transcends any other experiences I have had.
 - B. Has been entirely through normal human experiences.
82. I make basic decisions about my life:
 - + A. Only as I feel sure it is God's will for me.
 - B. As I feel it will give me the greatest happiness and the greatest usefulness.
84. My concern for human needs, my faith in the Christian response, and my own desire and ability to be a minister:
 - A. Are central to my conviction that I am called to the ministry.
 - + B. While important to me, are not in my case adequate enough reason for my entering the ministry.
96. When I made my decision to enter the ministry:
 - + A. I had no personal choice--I felt this was something I had to do.
 - B. Of the other vocations open to me, this was what I wanted to do the most.
99. The appeal of the ministry as a kind of work that will give me enjoyment and satisfaction:
 - A. Is the basic motive underlying my interest in the ministry.
 - + B. Has not figured greatly in my decision up to now.

CC (Concept of the Call)

101. It is my belief that God's call to the ministry:
 - A. More or less implies that a person wants to be a minister.
 - + B. Quite often extends to persons who at the time would prefer not to be ministers.
102. It is my belief that God's call to the ministry:
 - A. More or less implies that a person has the necessary intellectual qualifications.
 - + B. Quite often extends to persons of extremely modest ability through whom He can show His power.
103. In a major decision such as entering the ministry, it is my feeling:
 - + A. That God will reveal His will to us beyond any doubt.
 - B. That some doubt may still be present when God reveals His will to us.
104. When I speak of being "called" to the ministry, I am thinking:
 - + A. Of an unusual, mystical and supernatural kind of experience that separates a person to God's work.
 - B. Of a very natural experience, similar to what prompts a person to go into any vocation.
105. In deciding whether to accept a candidate for the ministry, a seminary should be more concerned about:
 - A. His abilities and qualifications.
 - + B. Whether he has a genuine call of God.
106. It seems to me that a person who is ordained without a distinct certainty of being called by God to the ministry:
 - + A. Commits a serious error--even a sin in some cases.
 - B. Is simply being honest with himself and can still be a good minister.
107. God's call to the ministry:
 - A. More or less implies that a person has desirable qualities of personality and leadership.
 - + B. Is without respect to persons--God will supply the qualifications.
108. If a person definitely wants to be a minister and can fulfill all the requirements of his denomination:
 - A. Then this itself constitutes the "call".
 - + B. The call is something else--he may not be called at all.
109. I think that a person should enter the ministry:
 - + A. Only if he is certain it is God's will.
 - B. If he is a sincere Christian, and thinks the ministry is where he can contribute most.
110. It is my feeling that:
 - A. A minister should periodically reconsider his vocational choice.
 - + B. The call of God is for a lifetime ministry.

FL (Flexibility)

57. The kinds of courses I enjoyed most in college are those in which:
- A. The basic content is fairly well defined.
+ B. Many of the answers are not yet in.
59. It is my opinion that:
+ A. Doubts are opportunities for creative thought.
- B. Christians should work toward overcoming their doubts.
61. The statement that agrees more closely with my own thinking about God is:
+ A. I form my ideas about God cautiously--there is much that I do not understand.
- B. I have the assurance of faith that what I believe about God is true.
64. In my dealings with people, I would:
+ A. Tell a lie if it will help someone in need.
- B. Always tell the truth.
67. I prefer a professor who:
- A. Tells us clearly what he wants us to learn.
+ B. Expects a lot of extra reading and independent studying.
70. I prefer plays or stories in which:
+ A. The conclusion is left to the reader's imagination.
- B. The ending is clear and complete.
73. In college, I usually selected friends and professors who:
- A. Shared my outlook and convictions.
+ B. Challenged my perspective and questioned my convictions.
77. When I consider God's unchangeableness and His constant creativity, the attribute which means more to me:
- A. Is His unchangeableness.
+ B. Is His constant creativity.
80. When attracted by ideas which could tend to undermine my faith:
+ A. I feel I must entertain them honestly, regardless of what might happen to my faith.
- B. I am careful not to become too involved in them.

A (Acceptance by others)

	<u>In Items:</u>
1. The church and the ministry were vital factors in the environment in which I grew up.	131 143 151
2. People encouraged me and seemed to think of me as the kind of person who would be a good minister.	121 135 155
3. My interest in the ministry found ready acceptance and support from my family and friends.	123 141 146
4. I recognize that the influence of others contributed to my initial interest in the ministry.	129 149 152

I (Intellectual Concern)In items:

- | | |
|---|-------------------|
| 1. I recognized the church's need for a dedicated ministry based on sound Christian scholarship. | 125
131
140 |
| 2. I wished to relate the insights of Christian thinking to our understanding of other fields of knowledge. | 130
138
155 |
| 3. I felt an increasing interest in theological issues and wanted to explore them more deeply. | 126
136
141 |
| 4. I was attracted to the opportunities for continued study and intellectual growth which the ministry affords. | 132
144
149 |

F (Self-fulfillment)In items:

- | | |
|---|-------------------|
| 1. I felt I would be unhappy in any other vocation - the church offered me a sense of personal fulfillment. | 128
131
147 |
| 2. Entering the ministry was for me a decisive answer to the competing claims of Christ and the world upon my life. | 121
130
148 |
| 3. I had a feeling of unrest and dissatisfaction with myself until I decided for the ministry. | 133
136
146 |
| 4. I have come to see that my need to find myself helped determine my choice of the ministry. | 137
144
152 |

L (Leadership success)In items:

- | | |
|--|-------------------|
| 1. I felt my personality and abilities were well suited for the work of the church. | 125
128
143 |
| 2. The ministry appealed to me as the type of work I would both enjoy and do effectively. | 130
135
145 |
| 3. I found it rewarding to assume leadership and responsibility in church activities. | 123
136
153 |
| 4. From my contacts with successful ministers, I came to view the ministry as a stimulating, challenging vocation. | 129
132
137 |

E (Evangelistic witness)In items:

1. I wanted to advance the church's redemptive outreach to mankind.	140 143 147
2. By becoming a minister, I could devote my full time to preaching the Gospel.	135 138 148
3. I wanted to witness to others about the eternal life Christ offers.	126 146 153
4. I saw the urgent need to lead people away from sin into a personal religious experience.	122 137 149

R (Social Reform)In items:

- | | |
|---|-------------------|
| 1. I wanted to bring the resources of the church to bear upon the problems of community living. | 125
147
151 |
| 2. To me the ministry seemed to afford opportunities for a creative stand in social issues. | 121
138
145 |
| 3. I felt that as a minister I could take effective action against the moral ills of our society. | 133
141
153 |
| 4. As a minister I would be in a position to do something about the world's suffering and need. | 122
132
152 |

P (Service to Persons)In items:

- | | |
|--|-------------------|
| 1. I wanted to share in the church's contribution to people's emotional health and maturity. | 128
140
151 |
| 2. Entering the ministry was an outgrowth of my interest in people and my apparent ability to help them. | 145
148
155 |
| 3. As a minister I could counsel with individuals at the deepest levels of their self-understanding and religious development. | 123
126
133 |
| 4. I felt I could give support to persons who were adjusting to the crises, sorrows, and demands of everyday living. | 122
129
144 |

KEY FOR SCORED ITEMS

Section II scales

56a SL	65b NL	74b SL	83a NL	104a CC
57b FL	66b SL	75b NL	84b SL	105b CC
58a D	67b FL	76b D	96a SL	106a CC
59a FL	68a SL	77b FL	97a D	197b CC
60a NL	69b D	78a SL	98a NL	108b CC
61a FL	70a FL	79b NL	99b SL	109a CC
62b D	71b NL	80a FL	101b CC	110b CC
63b SL	72b SL	81a D	102b CC	111a NL
64a FL	73b FL	82a SL	103a CC	113a NL

Notes:

1. Items are listed as scored positively on scales. The alternative response to each item--a or b-- is scored negatively on the same scale.
2. Items 85-95 are experimental items and are unscored.
3. Items 111 and 113 are Section III items scored on the NL scale.

Section IV scales

121 A R	130 A I	138 A E	147 A E
121 B A	130 B F	138 B R	147 B F
121 C F	130 C L	138 C I	147 C R
122 A R	131 A A	140 A E	148 A F
122 B P	131 B I	140 B I	148 B P
122 C E	131 C F	140 C P	148 C E
123 A P	132 A I	141 A I	149 A E
123 B A	132 B R	141 B R	149 B A
123 C L	132 C L	141 C A	149 C I
125 A I	133 A R	143 A L	151 A P
125 B L	133 B F	143 B A	151 B R
125 C R	133 C P	143 C E	151 C A
126 A E	135 A A	144 A F	152 A A
126 B I	135 B L	144 B I	152 B R
126 C P	135 C E	144 C P	152 C F
128 A F	136 A I	145 A L	153 A L
128 B P	136 B L	145 B R	153 B R
128 C L	136 C F	145 C P	153 C E
129 A L	137 A L	146 A E	155 A I
129 B P	137 B E	146 B F	155 B P
129 C A	137 C F	146 C A	155 C A

Note:

Items 124, 127, 134, 139, 142, 150, and 154 are experimental and are unscored.

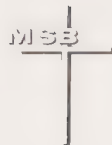
relation of tsi scores and selected items of BIOGRAPHICAL information

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PUBLISHED BY THE MINISTRY STUDIES BOARD AS A SUPPLEMENT TO
VOCATIONAL GUIDANCE OF THEOLOGICAL STUDENTS
A MANUAL FOR THE USE OF THE THEOLOGICAL SCHOOL INVENTORY

RELATION OF TSI SCORES AND SELECTED ITEMS OF BIOGRAPHICAL INFORMATION

Frederick Kling, Ellery Pierson, and James Dittes¹

The correlation of TSI scores with biographical data should serve two purposes:

1. The validity of certain interpretations of scores can be supported; interpretations of a high score on a particular scale frequently imply a prediction that such a score will be more characteristic of a person with one type of background than with another. For example, the TSI manual's description of the NL (Natural Leading) scale implies that a higher score should reflect greater satisfying past participation in church life. This can be tested by noting the correlation between the NL score and such data as (a) whether or not the student reports previous professional parish experience and (b) how highly he rates the adequacy of his home church's "religious training".
2. Interpretation of scores for particular students can be aided by noting the characteristic group differences implied in correlations between scores and background data. Idiosyncratic or individual interpretation of a score need not be invoked when the score is characteristic of a group to which the student belongs. For example, although the TSI manual suggests several possible interpretations of the F (Self-fulfillment) scale, the correlational data presented in this report suggest that an elevated F score is highly characteristic of older men entering seminary after experience in another vocation. For such a student, a higher F score may be regarded as "normal", and special interpretation inappropriate. (Presumably, as data subsequently accumulate, the norms implied by these correlational data will be replaced by more formal norms for such sub-groups of students.)

Procedure

Form B of the TSI (Scored as Form C) was administered to the entering class in 22 theological schools in the fall of 1959. Ten students were selected at random from each of these schools (five each from two smaller schools) to provide a total sample of 220 students. Product-moment correlations were calculated among the 12 scale scores and 32 items of biographical information selected from Section I.

Schools represented were: Anderson, Boston University, Brite, Christian, Colgate-Rochester, Columbia, Concordia, Drew, Eastern Baptist, Garret, Golden Gate, Lancaster, Louisville Presbyterian, Northwestern Lutheran, Pacific Lutheran, Princeton, Seabury-Western (5 in sample), Southern Baptist, Trinity (5 in sample), Union (Richmond), United (Dayton), Wesley, Yale.

The biographical self-report data are represented by the following items of Section I on Form C: 2, 5, 6, 8, 9, 10, 13, 14, 15, 16, 17, 18, 23, 24, 27, 28, 34, 35, 37, 38, 43, 44, 45, 46, 47, 48, 49, 51, 52.

Special scoring problems were presented by items 9 and 10 (concerning liked and disliked courses), 51 (type of ministry preferred), and 52 (sources of influence).

College courses. The items ask for two liked and two disliked courses. Replies were coded according to four categories: Humanities; Social sciences and education; Physical sciences and mathematics; Religion and Biblical languages. A score was given each student for each of these

¹ Kling supervised the collection and analysis of the data. Pierson performed the analysis. The present report is written by Dittes. The research was conducted under the auspices of the Ministry Study of Educational Testing Service, supported by the Lilly Endowment.

categories, representing an algebraic sum of the number of times he mentioned a course in that category as liked (+) or disliked (-).

Types of ministry. Item 51 asks the student to indicate the form of ministry in which he is most interested (and also the form(s) in which he is somewhat, and least interested). The five choices are: (1) parish ministry, (2) missions, (3) religious education, (4) chaplaincy, and (5) teaching in college or seminary. In this analysis, these five choices were regarded as a single scale, ranging from parish to teaching and each student assigned the number representing the form in which he indicated "most interest". Since the parish ministry had overwhelmingly the greatest frequency, the scale scores are highly skewed and represent primarily whether or not a student is attracted to the parish ministry.

Sources of influence. Item 52 provides the student with an answer form similar to that for 51. He is asked to indicate which one group most influenced his decision to enter the ministry (and also which persons gave some and least influence). The four choices in the item in Form B were: (1) family, (2) friends your own age, (3) ministers, and (4) teachers. These choices were regarded as a single scale ranging from parents to teachers, and each student assigned a number representing the source he described as most influential.¹

Results

Table 1 presents the correlations between TSI scales and those background variables which showed the greatest relationship with the scales. Table 2 presents all the remaining statistically significant correlations obtained in the study (for $p = .05$, $r = .13$). Interpretations of these findings have been suggested in Sections 4 and 8 of the manual of the test, on pages as indicated in the tables.

In brief summary, the following confirmations of the interpretations of the scales are provided. The D scale is correlated with evidence of maturity and past involvement in parish work and with explicit preference for parish ministry. NL is significantly correlated with evidence of favorable experience in church life. SL, CC, and D are correlated with a cluster of variables indicating relatively close and conventional experience with the parish church and with an explicit commitment to the parish ministry. A number of negative correlations of the SL scale with background variables is interesting suggestion of the degree to which the student feels aloof and in transition from the more conventional influences such as family and home church. The A scale shows strong correlations with evidence of influence of family and with an early decision. The I scale shows a generally negative pattern of correlation of relationship with conventional association with home and church. F scale shows strong correlation with a late decision for the ministry. L scale shows a correlation with earlier decision but without relation with church experience or family influence. The R scale shows negative correlations with suggestions of influence by home and family, as does the P scale to a slight degree. Both R and P scales are given some interpretation in the manual as related to a mildly rebellious adolescent searching for new definitions and purposes.

In general the patterns of results were confirmed in a subsequent partial replication (See TSI Research Bulletin # 3).

The analysis also, of course, generated inter-correlations among the TSI scales. These have already been reported (in Appendix IV of the manual).

¹ In a subsequent partial replication of this study (See Theological School Inventory Research Bulletin # 3) these items were analyzed differently, but with results generally consistent with those found in this study. In the later study, each choice in the items concerning type of ministry and sources of influence was regarded as a separate scale (ranging from "most" to "least" interested), nine scales in all for the two items, so that the degree of interest in each type of ministry and degree of influence attributed to each source could be separately assessed.

Correlations among the different personal items have been ignored, except as similar correlations with a particular scale implies a clustering of the personal background variables. In general, it may be reported that two distinct clusters of background variables were clear. One of these represented degree of family religious activity, represented by correlations of about .50 among ratings of father's activity in church, mother's activity in church, and adequacy of home religious training. Rating of adequacy of church religious training was only slightly correlated with these. The other cluster centered around age, which was correlated about .60 with age of decision, about .40 with being married, and in the .20's with such variables as previous graduate study, previous professional church experience, a change of denominations, and -.20 with having college friends enter the ministry.

Table 1: CORRELATION BETWEEN TSI SCORES AND SELECTED BACKGROUND VARIABLES

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
Age on entering seminary	.29	.04	.28	.24	-.15	-.14	-.20	.29	-.21	.25	-.08	-.10
Married on entering seminary	.24	.12	.13	.10	-.03	-.11	-.08	.17	-.13	.15	.02	-.11
Age of first decision for ministry	.16	-.07	.29	.24	-.08	-.26	-.04	.32	-.22	.13	.00	-.07
Age of final decision for ministry	.04	-.12	.14	.16	-.13	-.13	-.04	.24	-.16	.05	-.05	.02
Previous professional parish experience	.29	.22	.11	.04	.09	-.10	-.14	.14	-.13	.16	.01	-.04
Rated adequacy of home religious training	.07	.15	-.08	-.04	-.10	.38	-.13	-.13	.04	-.01	-.10	-.02
Rated adequacy of church religious training	.19	.20	.02	.10	-.20	.10	-.14	.02	-.00	.11	-.13	-.04
Number of close friends in ministry	.08	.13	.02	-.07	-.09	.21	-.16	-.05	.03	.13	-.11	-.06
Activity of father in home church	.05	.11	-.06	-.06	-.12	.35	.02	-.06	.10	-.02	-.19	-.17
Activity of mother in home church	-.04	.01	-.02	.04	-.10	.28	-.03	-.01	-.01	-.02	-.06	-.09
Father a college graduate	-.22	-.06	-.20	-.12	.09	.07	.10	-.14	.10	-.15	.06	.04
Liking of physical science and math	-.08	-.18	.11	.04	-.13	.18	-.02	-.06	-.07	-.02	-.10	.14
Types of ministry (Preference for parish and away from teaching)	.20	.07	.21	.20	-.17	.10	-.25	.09	-.06	.14	-.14	.03
Sources of influence (Influenced more by family than by teachers)	-.04	.01	.15	.16	-.17	.03	-.09	.06	-.15	.13	.03	.06
- - - - -	-	-	-	-	-	-	-	-	-	-	-	-
Pages of manual on which results are discussed:	19 48	21 22	23 50	50	54	26 55 56	27 54 58	28 60	29 62	30 64	65	67

Table 2: CORRELATION BETWEEN TSI SCORES AND MISCELLANEOUS BACKGROUND VARIABLES

		Page of manual on which results are discussed:
Between <u>D</u> (Definiteness) and		
Age when married	-.23	19
Between <u>NL</u> (Natural Leading) and		
Age when father died (father still living)	.14	
Between <u>SL</u> (Special Leading) and		
Change of denominations	.13	51
Age when married	-.15	
Between <u>CC</u> (Concept of the Call) and		
Previous seminary experience	.14	
Between <u>FL</u> (Flexibility) and		
Number of siblings in ministry	-.13	54
Between <u>A</u> (Acceptance by others) and		
Size of home town	-.15	55
Between <u>I</u> (Intellectual concern) and		
Number of relatives in ministry	-.15	58
Size of home church	.19	
Between <u>E</u> (Evangelistic witness) and		
Number of siblings in ministry	.16	
Between <u>R</u> (Social Reform) and		
Number of others from home church in ministry	-.16	65
Number of relatives in ministry	-.14	
Between <u>P</u> and		
Previous seminary experience	-.19	67
Number of others from home church in ministry	-.13	

face impression study:
correlation of tsi scores with student self-report of motivation
and with interviewer ratings

BY

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FACE IMPRESSION STUDY:

Correlation of TSI Scores with Student Self-Report of Motivation and with Interviewer Ratings

James E. Dittes and Harry DeWire¹

The primary validity claim for the TSI is that it presents, arrayed objectively, the pattern or profile of particular motivations for the ministry which the student can recognize as his own (Cf. Section I of Manual). The first major attempt to test the validity of the instrument, therefore, should consist precisely in asking the student whether he perceives his own pattern of motivation to be the same as the pattern suggested by his TSI scores.

This study attempted to discover whether the student's own ranking of his motives, and an interviewer's rating of the student's motives would substantially agree with his TSI scores. The study focused primarily on the seven AIFLERP scales of Section IV.

Procedure

Sample:

Of the 25 theological schools which administered the TSI (Form B, scored as Form C) to entering classes in 1961, 18 agreed to cooperate in further research. In each of these schools, 18 students were selected at random (except where the total class was smaller than 18). The cooperating faculty interviewer in each school was instructed to obtain interviews and further data from at least 12 of these 18. In most schools, cooperation of students and interviewer was such that this quota was exceeded.

The total sample was 272. Cooperating schools and the size of their contribution to the sample are listed as follows: Anderson (15), Brite (14), Christian (14), Concordia (14), Crozer (12), Drew (15), Garrett (17), Lancaster (18), Louisville Presbyterian (17), Northern Baptist (17), Northwestern Lutheran (16), Seabury Western (18), Southern Baptist (18), Trinity (8, the entire class), Union (Richmond) (16), United (Dayton) (18), Wesley (13), Yale (12).

Data:

Data comprised the 12 TSI scores, self-rankings, ratings by faculty interviewers, and certain additional indices derived from combinations of some of the above data.

Self-rankings. Several weeks after entering school and taking the TSI, each student was invited to an interview with the cooperating faculty research associate. He was not informed of his TSI scores until the end of the interview. During the interview he was presented with a concise summary of each of the AIFLERP motivations and asked to rank these according to the relative degree he felt them part of his own motivation for the ministry. The summaries to which the students responded are quoted below, in the customary order (AIFLERP):

¹ This study was conducted by the Ministry Studies Board, with the partial financial support of Educational Testing Service. Data were collected under the supervision of DeWire and Dittes and analyzed by Dittes with the consultation of Frederick R. Kling. Grateful appreciation is expressed to the faculty research associates: Robert Barrett, Kenneth Breimeier, Edwin Burtner, Lowell Colston, Lyn Elder, Earl Furgeson, Cyril Garrett, Harry Goodykoontz, Donovan Greene, Paul Irion, Charles Kemp, Adam Miller, Jules Moreau, William Oglesby, Jr., George Parker, James Ranck, Peyton Thurmond, John Vayhinger, Warren Young.

My interest in the ministry was stimulated and nurtured by the encouragement I received from my family and friends. They let me know that, because of my abilities, I would make a good minister. My preparation for the ministry has found ready acceptance by the people who have been close to me.

Questions of a religious nature have a great attraction for me. My decision to enter the ministry provided me with the opportunity for intellectual discovery in the field of theology. I felt that through these academic disciplines I could develop a satisfying faith and at the same time give help to the church in a vital area of its need.

Much about my decision to enter the ministry is very personal. Other vocations could not bring satisfaction and personal fulfillment. The ministry provides opportunity for constant contact with spiritual things and a life of dedicated service.

The activities which I anticipate in the ministry are appealing to me. Success in past experiences in the church has given me confidence that I can provide the leadership expected of the minister. I believe I have the abilities necessary to perform the kinds of work I am preparing to do.

The ministry will give me opportunity to proclaim the gospel to people who are living without it. I have a strong desire to share in evangelizing the world through preaching and other forms of witnessing. I want to share with others what Christ has done in my own life.

Society is beset by moral ills, confusion, injustice, and tragedy. My interest in the ministry grows out of my concern for these and other social problems. Through my ministry I can share in the work of bringing hope to mankind, and help resolve the conflicts among groups and nations.

As a minister I can demonstrate my love for people by working with them as a servant and helper. I see the ministry as an opportunity to share both the sorrows and joys of the people I serve.

Ratings. At the end of the interview (at least 30 minutes) the faculty interviewer made two kinds of ratings. He rated, on a five-point scale, his estimate of the absolute degree of each of the AIFLERP motives. Definitions of the motives which he used were as follows:

Acceptance by others - A need to feel that others approve. Strong influence from people (usually family or church) as a dominant motivation. Strong attachment to parents or friends provides an assurance of becoming a good minister.

Intellectual concern - The search for meanings to the problem of life. A measured, rational approach to the relationship between the needs of the world and Christian beliefs and practices. A love for study and a desire to reach certitude in matters of the Christian faith.

Self-fulfillment - Personal needs are met through deciding for the ministry. The need to gain peace of mind, relate to people, and attain a sense of happiness. A desire to "fill in" the empty areas untouched by experiences in other vocations. Sometimes a feeling that the ministry is a natural fulfillment of a pious and sheltered temperament.

Leadership success - Activities anticipated in the ministry are appealing. Confidence in being a successful leader, often arising out of success in past experiences. Having the necessary requirements and liking for the kind of things expected of the minister.

Evangelistic witness - Emphasis upon the outreach of the message of Christianity. Proclaim the gospel of Christ to people who are living without it, and evangelize the world through some form of witness. The necessity of sharing what Christ has done in my own life.

Social Reform – Primary concern for the moral ills, confusion, and tragedies which befall society. Finding the solution that will bring hope to mankind and resolve the conflicts among groups and nations through the prophetic work of the ministry.

Service to Persons – Love for people and an understanding of their needs. A desire to work with them and administer to them as a servant and helper. Personal satisfaction that comes from vicarious involvement in the sorrow and happiness of others.

These ratings were frankly "contaminated" by the student's own discussion of his motivations in terms of the AIFLERP categories. The faculty ratings were not intended to be an independent "objective" judgment but rather another estimate reflecting the student's own self-perception.

Each interviewer also rated four more general characteristics of students:

1. In comparison with his peers, the student's overall motivation for the ministry is: (rating of "good" to "poor" on a five-point scale)
2. In comparison with his peers, the student's overall fitness for the ministry is: (ratings of "good" to "poor" on a five-point scale)
3. Does the student have any apparent emotional problems? (yes or no rated on a two-point scale)
4. Does the student indicate a capacity for growth? (yes or no rated on a two-point scale)

In the subsequent analysis, all faculty ratings were adjusted for differences among the means of the schools. They were not adjusted for differences in variability; it was assumed that greater variability within a scale most likely represented either greater actual variability among students, or greater confidence of the rater in making the distinctions required by the ratings.

Special AIFLERP Indices:

"Insight" score. For each student the correlation was computed between his seven actual AIFLERP motivations. This correlation averaged .49, with a standard deviation of .34.

AIFLERP parameters. Certain characteristics of the AIFLERP scores were recorded and analyzed, both to control the possibility that some scale results might be attributed to artifacts, such as range, and to explore whether a derived index, such as the "peak and plateau" index, might appear to have independent meaningful relationships. Such parameters have greater potential relationship and meaning because of the ipsative nature of these scales in which the sum of the scores is fixed, and the range of one scale is limited by the others. The indices used were:

1. Highest score among the AIFLERP scales. Mean: 20.3; SD: 2.5.
2. Lowest score among the AIFLERP scales. Mean: 4.0; SD: 2.2.
3. Range of AIFLERP scales. Mean: 16.2; SD: 3.7
4. Highest of ERP scales. Mean: 18.6; SD: 3.4.
5. "Peak" and "plateau" index. This was calculated by subtracting the range of the lower half of the AIFLERP distribution from the range of the upper half; i.e., with the formula: (Highest AIFLERP score – Median AIFLERP score) – (Median AIFLERP score – Lowest AIFLERP score). Or as actually used in calculation: Highest AIFLERP score + Lowest AIFLERP score – twice the median AIFLERP score. This was intended to estimate whether the more extreme "peaks" in the AIFLERP profile tended to occur in high scores or in low scores, i.e. whether the student could more clearly identify and differentiate the motives he claimed (high "peaks", represented by a high positive number on the "peak and plateau index") or the motives which he disavowed ("peaks" on the low side of the profile, represented by a high negative number on the "peak and plateau index"). The mean of this index was +1.7, with a standard deviation of 5.3, indicating a slight tendency for students to have peaks among their high scores and plateaus among their low scores, i.e., a slight tendency for students more readily to identify and distinguish at least one motive which they positively claim than one which they would positively deny.

Results

Table 1 presents the correlations between the TSI scores, the student's self-ranking of AIFLERP motives, and the interviewer's rating of each of the AIFLERP motives. All of the correlations are statistically significant, indicating substantial correspondence between the profiles presented by the TSI test scores and the pattern of motivation which the student presented during the interview. It is clear that I (Intellectual concern) and E (Evangelistic witness) are most easily discriminated. However, some of the correlations are obviously not as strong as would be desirable and expected in this type of direct validating study. These lower correlations will be subject to further analysis below.

Table 1: TSI SCORES AND DIRECT SELF-PERCEPTION

(N = 272, 18 schools; for $p = .05$, $r = .12$; for $p = .01$, $r = .15$)

Correlations between:

<u>Scale</u>	<u>TSI Score and Self-ranking</u>	<u>TSI Score and Faculty Rating</u>	<u>Self-ranking and Faculty Rating</u>	<u>Page of Manual</u>
<u>A</u>	.35	.13	.35	26
<u>I</u>	.56	.32	.46	27
<u>F</u>	.33	.14	.37	27
<u>L</u>	.44	.27	.33	
<u>E</u>	.59	.31	.36	27, 29
<u>R</u>	.42	.33	.37	
<u>P</u>	.15	.14	.46	

Table 2 presents the results of a factor analysis based on the correlations among the 37 variables used in this study. Twelve factors were extracted with an eigenvalue of 1 or greater. These were given an orthogonal rotation. The variables are listed in Table 2 which have a factor loading of .15 or more. Factor 1 appears clearly to pick up the liberal-conservative dimension inherent in the scores. Factors 3 and 4 reflect certain characteristics of the distribution of these scores, which are independent of any of the scales. Factors 8 and 12 reflect the halo effects in the ratings of motivation by the interviewers.

Five of the AIFLERP motivations appear to occupy unique factors, indicating that each can be distinctly identified by students and interviewers. Factors 2, 6, 7, 9, and 11 each appear to be defined by one of the scales, I, L, E, R, P, identified by a cluster of the TSI scores, the student's self-ranking, and the interviewer's rating for that one motivation.

A (Acceptance by others) and F (Self-fulfillment) occupy different ends of Factor 5. This is probably related to the fact that these two scales show weaker correlations in Table 1 and to the fact that the A score - because it is consistently the lowest of the AIFLERP scores - is related with the range and therefore appears loaded on Factor 4. A also has some loading opposite P on Factor 6. Paired with F, A may relate to an "other- vs. inner-directed" dimension. Paired with P, it may represent a "nurturance-succourance" or a "giving-receiving" difference.

(Table 2: Major Factor Loadings, continued)

<u>Factor 10</u>		<u>Factor 11 (L)</u>		<u>Factor 12</u>	
F score	.56	F self-ranking	.22	Growth rating	.77
<u>L</u> score	.21	<u>FL</u> score	.22	<u>I</u> rating	.29
<u>A</u> score	.16	<u>R</u> self-ranking	.20	<u>A</u> score	.25
<u>CC</u> score	.15	<u>D</u> score	-.25	<u>A</u> rating	.16
<u>A</u> self-ranking	-.20	<u>Insight</u> Rating	-.28	<u>F</u> score	-.15
<u>P</u> rating	-.21	<u>NL</u> score	-.40	<u>Insight</u> Index	-.27
<u>R</u> score	-.23	<u>L</u> score	-.44	<u>Fitness</u> Rating	-.29
<u>A</u> rating	-.25	<u>L</u> self-ranking	-.66	<u>Problem</u> Rating	-.60
<u>Highest ERP</u>	-.53	<u>L</u> rating	-.72		
<u>P</u> score	-.68				

P. 55

P. 61

As in Table 1, I emerges as a very distinct and definable factor, the first factor to emerge after the general liberal-conservative factor. E is somewhat less distinctive in the factor analysis, because the factor analysis includes the SL (Special Leading) and CC (Concept of the Call) scores and much of the variance of E is taken up by the first liberal-conservative factor.

Discussion

It seems clear that four of the AIFLERP scores show satisfactory distinct validity, in the sense being tested in this study. The scores show substantial correlation (above .40) with self-ranking, and the categories show distinct and well-defined factors in the factor analysis, with the scores, ratings, and self-rankings clustering close together. These are the scales measuring I (Intellectual concern), L (Leadership success), E (Evangelistic witness), and R (Social Reform).

The P (Service to Persons) score shows the least satisfactory validity in this study, and the A (Acceptance by others) and F (Self-fulfillment) scales are not as distinct and definable, apparently, as would be desirable. Further analyses were undertaken to help understand the relatively weak apparent validity of these three scales.

Relation between variability and identifiability. Noting that P (Service to Persons) has the lowest variability of any TSI scale, it was hypothesized that the lower general discriminability of this scale would make it more difficult to rate reliably. The following analysis was performed to check this possible relation between variability and likelihood of greater correlation between score and rating (or ranking).

Correlations among scores, self-rankings, and faculty ratings were computed separately for one-third (i.e., 6) of the schools in the sample. Of the resulting 42 correlations (7 scales, 6 schools) between score and self-ranking, 18 were statistically significant at the .05 level (i.e., $r > .50$). Eleven of the correlations between score and faculty ranking were significant. Were these correlations more likely to be significant in a sample which was more deviant on a particular scale? To develop a crude index of deviation, the 42 mean scores (7 scales, 6 schools) were divided into about three equal groups according to whether the school mean was a full point or more above the overall mean among all schools, was within a point of the overall mean, or was at least a full point below the overall mean.

Table 3: RELATION BETWEEN DEVIATION OF MEAN SCORE OF SAMPLE AND SIGNIFICANCE OF CORRELATION BETWEEN SCORE AND SELF-RANKING

	Number of Significant Correlations ($r > .50$)	Number of Non-significant Correlations ($r < .50$)	Average Correlation (arithmetically averaged)
Mean score of sample > Overall mean + 1.0	11	3	.62
Mean score of sample within 1.0 of overall mean	2	14	.24
Mean score of sample < Overall mean - 1.0	5	7	.35

Table 4: RELATION BETWEEN DEVIATION OF MEAN SCORE OF SAMPLE AND SIGNIFICANCE OF CORRELATION BETWEEN SCORE AND FACULTY RANKING

	Number of Significant Correlations ($r > .50$)	Number of Non-significant Correlations ($r < .50$)	Average Correlation (arithmetically averaged)
Mean score of sample > Overall mean + 1.0	7	7	.36
Mean score of sample within 1.0 of overall mean	2	14	.10
Mean score of sample < Overall mean - 1.0	2	10	.16

Chi-square based on Table 3 yields $p < .001$, and on Table 4 $p < .05$. There is a definite tendency for more deviant scores to be more readily recognizable in self-rankings and, to a lesser degree, in faculty ratings. This is especially true of strongly positive scores.

Since some schools are positively deviant on some scales, and some schools on others, the tendency shown in Tables 3 and 4 tends to be averaged out and concealed in Table 1. The main exception is \bar{P} , on which only one school exceeds the overall mean by 1.0; correlations of \bar{P} score with ranking and rating were .64 and .70, respectively, in this one school.

Inadequate statements for ranking and rating? The summaries of the AIFLERP motivations given to students and to interviewers were not as carefully pre-tested as they should have been to insure comparability to the items on the scales and to the general definitions of the items advanced by the manual. It is possible that some of the poor correlations and poor clusterings among TSI scores and ratings and rankings may be due to the fact that these definitions include elements slightly different from the scales as defined by the items (see Section 4 and Appendix I of the manual).

It appears that the definition for A (Acceptance by others) given to interviewers deviates from the actual TSI items by referring to a general "need for approval". The items make clear that it is more the specific influence of family on the decision for the ministry which is involved (see page 26 of the manual).

Similarly the definition for F (Self-fulfillment) also appears more general than the actual items would warrant. The reference to meeting of "personal needs" such as peace of mind or relating to people is not really warranted by the items (see page 27 of the manual).

The P (Service to Persons) definitions may omit the degree of intimacy in "pastoral ministry" which the items imply. The definition uses more remote terms, such as the abstract categories of "servant and helper" and the notion of "vicarious involvement".

These differences help to focus the definition of the scales as given in the manual. The study ought now to be replicated with revised definitions.

Additional Results

More experienced raters produced higher correlations:

There is also some reason to believe that the results of Table 1 are affected by the experience of the faculty research associates who collected the self-ranking and rating data. To check this, of the 18 schools in the sample, three were selected in which the faculty associate had intimate familiarity with the test scales and also doctoral training in psychology (presumably enhancing both his clinical and research skills). Three other schools were selected in which neither of these conditions was true. The results appear in Table 5. The schools with the experienced researchers produced far more statistically significant correlations than the schools with the less sophisticated interviewers. The differences are statistically significant at the .05 level of confidence by chi-square tests. The difference may reflect simply the different skill and experience of the researchers. Or it may also reflect the great likelihood of self-reflection and sensitivity to motivation in those schools which also have on their staff persons more sophisticated in psychology and regarding the TSI.

Table 5: NUMBER OF CORRELATIONS REACHING AND NOT REACHING STATISTICAL SIGNIFICANCE IN SELECTED SCHOOLS

	Correlations between scores and rankings		Correlations between scores and ratings	
	Statistically significant	Not statistically significant	Statistically significant	Not statistically significant
In 3 schools with "sophisticated interviewers"	15	6	9	12
In 3 schools with less "sophisticated interviewers"	3	18	2	19

Relation between TSI scores and special AIFLERP indices:

Table 6 presents the correlations between the TSI scores and the special indices that were derived from the AIFLERP scores. The "insight" score is correlated positively with L (Leadership success) and negatively with E (Evangelistic witness), FL (Flexibility), and CC (Concept of the Call), suggesting different degrees of self-reflective insight associated with these particular motivations.

The correlations with the A score are related to the fact that this score has consistently the lowest mean and that therefore its magnitude is related to the range of AIFLERP scores and derived measures.

The remaining statistically significant correlations all appear to point to the fact that whenever the E (Evangelistic witness) motivation is held substantially, it is held strongly and unequivocally, producing a sharp peak on the AIFLERP profile. This scale, with its correlated scales of CC (Concept of the Call) and SL (Special Leading), is positively correlated with the intended peak and plateau index. The slight negative correlation of the peak and plateau index with P (Service to Persons) appears to represent the rejection of P motivation as too naturalistic by high E scores; the same students who know very definitely that their motivation is E are also relatively certain that it is not P.

Correlation of TSI scores with additional interviewer ratings:

Some further interpretation of the TSI scales is provided by noting the correlation between the scores and the interviewer's ratings of quality of motivation, fitness for the ministry, presence of emotional problems, and capacity for growth. Since the judgments are generally made from particular perspectives, it is important for understanding the correlations to know whatever we can about the raters who are making the judgments. Accordingly, Tables 7, 8, 9, and 10 present these correlations for each of the six schools in which they were separately analyzed.

It is important, for example, to note in connection with the manual's description of the A (Acceptance by others) scale (see pages 25 and following of the manual), that the tendency for positive correlation between A and the rated quality of motivation occurs at those two schools which more represent traditions of a solid community nurturance of a boy into the ministry; these are the Lutheran and Southern Baptist traditions. Or, similarly, in connection with the interpretation of the F (Self-fulfillment) score (see page 27 of the manual), it is important to notice that the tendency for a positive correlation with rated estimate of emotional problems tends to occur only at the more "liberal" schools and not at Anderson or Southern Baptist. It is also consistent with the manual's (page 31) interpretation of P (Service to Persons) to note that this has been correlated positively with ratings of motivation and fitness at the liberal schools and negatively at the more conservative schools. Fuller interpretation of these correlations is made in the text of the manual, Sections 4 and 8.

Additional correlations:

This study, of course, also produced intercorrelations among the TSI scales. These are reported separately in Appendix IV of the main text of the manual.

Table 6: CORRELATION BETWEEN TSI SCORES AND SPECIAL AIFLERP INDICES

(N = 272, 18 schools; for $p = .05$, $r = .12$; for $p = .01$, $r = .15$)

	<u>Insight</u>	<u>Highest AIFLERP</u>	<u>Lowest AIFLERP</u>	<u>Highest ERP</u>	<u>Peak and Plateau</u>	<u>Median</u>	<u>Range</u>	<u>Pages of Manual</u>
<u>D</u>	-.06	-.04	.03	.05	.01	-.03	-.04	
<u>NL</u>	.00	-.04	.00	-.08	.00	-.02	-.03	
<u>SL</u>	-.13	.17	.04	.25	.13	-.07	.09	50
<u>CC</u>	-.17	.19	-.01	.28	.13	-.08	.13	50
<u>FL</u>	.09	-.10	-.06	-.12	-.11	.11	-.03	
<u>A</u>	.12	-.17	.33	-.27	.02	.02	-.30	57
<u>I</u>	.09	-.09	.00	-.19	-.05	.03	-.06	
<u>F</u>	-.11	.14	-.03	-.12	.03	.00	.12	28
<u>L</u>	.19	-.17	.08	-.40	-.07	.10	-.16	62
<u>E</u>	-.16	.31	-.05	.57	.18	-.11	.23	29
<u>R</u>	-.00	-.01	-.14	.15	-.09	-.02	.07	
<u>P</u>	-.03	-.02	-.12	.18	-.13	-.00	.05	68

Table 7: CORRELATION BETWEEN TSI SCORES AND RATED QUALITY OF MOTIVATION

	<u>Anderson</u>	<u>Concordia</u>	<u>Garrett</u>	<u>Southern Baptist</u>	<u>United</u>	<u>Yale</u>	<u>Total Sample</u>	<u>Pages of Manual</u>
N=	15	14	17	18	18	12	272	
for $p=.05$, $r=$	.50	.51	.47	.46	.46	.55	.12	
<u>D</u>	-.14	.12	-.67	-.11	-.40	.02	-.16	
<u>NL</u>	-.05	-.13	-.03	-.14	-.07	-.16	-.07	
<u>SL</u>	.04	-.57	-.51	.26	-.42	-.46	-.13	50
<u>CC</u>	-.07	-.38	-.43	.12	-.38	.04	-.13	50
<u>FL</u>	-.09	-.48	.00	-.17	.29	-.42	.03	
<u>A</u>	-.13	.27	.06	.38	-.40	.11	.01	55
<u>I</u>	.04	.21	.38	-.20	-.10	-.07	.10	
<u>F</u>	.17	-.52	-.48	-.05	.08	-.06	-.06	
<u>L</u>	-.05	.47	.35	.10	.27	.06	.06	
<u>E</u>	-.12	-.57	-.52	.18	-.27	.10	-.15	63
<u>R</u>	.31	.36	.01	-.34	.26	-.13	.03	
<u>P</u>	.04	-.29	.37	-.35	.29	-.31	.03	67
<u>Intercorrelations among ratings:</u>								
Fitness	.10	.70	.22	.56	.24	.33	.40	
Emotional Problems	-.04	-.22	.22	.53	.45	-.06	.19	
Growth	.18	-.29	-.02	-.69	.17	.32	-.06	

Table 8: CORRELATION BETWEEN TSI SCORES AND RATED FITNESS FOR THE MINISTRY

	<u>Anderson</u>	<u>Concordia</u>	<u>Garrett</u>	<u>Southern Baptist</u>	<u>United</u>	<u>Yale</u>	<u>Total Sample</u>	<u>Pages of Manual</u>
N=	15	14	17	18	18	12	272	
for $p=.05, r=$	.50	.51	.47	.46	.46	.55	.12	
<u>D</u>	.46	.18	-.17	.04	.26	-.32	.05	
<u>NL</u>	.03	-.23	.03	-.21	-.01	-.07	-.05	
<u>SL</u>	.30	-.18	-.05	.21	.17	-.77	.08	
<u>CC</u>	.30	.03	-.03	.16	.27	-.22	.20	
<u>FL</u>	.34	-.63	-.10	-.10	.30	-.20	-.13	
<u>A</u>	.07	.27	-.02	.02	-.28	.02	.05	
<u>I</u>	.15	-.03	.21	-.11	.43	.46	.06	
<u>F</u>	.33	.08	.06	-.15	-.08	-.40	.08	
<u>L</u>	-.13	.27	-.20	.07	-.37	.22	-.08	
<u>E</u>	-.05	-.56	-.01	.25	.31	-.06	-.04	
<u>R</u>	.26	-.07	-.08	.09	.18	.00	.01	
<u>P</u>	-.50	-.34	.13	-.33	.02	.12	-.05	67
<u>Intercorrelations among ratings:</u>								
Motivation	.10	.70	.22	.56	.24	.33	.40	
Emotional Problems	.34	.05	.18	.58	.34	.00	.25	
Growth	-.70	-.63	.10	-.65	-.37	.66	-.23	

Table 9: CORRELATION BETWEEN TSI SCORES AND RATED PRESENCE OF EMOTIONAL PROBLEMS

	<u>Anderson</u>	<u>Concordia</u>	<u>Garrett</u>	<u>Southern Baptist</u>	<u>United</u>	<u>Yale</u>	<u>Total Sample</u>	<u>Pages of Manual</u>
N=	15	14	17	18	18	12	272	
for $p=.05, r=$	.50	.51	.47	.46	.46	.55	.12	
<u>D</u>	.37	-.24	.04	-.22	-.01	.12	-.01	
<u>NL</u>	-.07	-.31	-.03	-.24	-.30	.27	-.05	
<u>SL</u>	-.22	.15	.47	.19	.19	.31	.11	50
<u>CC</u>	-.24	.07	.50	.22	.02	.48	.06	
<u>FL</u>	.07	-.13	.32	.12	.17	-.50	-.02	
<u>A</u>	-.23	-.06	-.44	-.09	-.40	-.21	-.07	55,57
<u>I</u>	-.27	.05	.06	-.25	-.08	-.30	-.01	
<u>F</u>	.12	.24	.38	.01	.27	.51	.08	61
<u>L</u>	.23	-.18	-.48	.12	-.27	.04	-.13	
<u>E</u>	-.03	-.29	.14	.21	.01	.23	.03	63
<u>R</u>	.03	-.46	.04	.10	.30	-.56	.03	
<u>P</u>	.05	.12	.16	-.11	.46	.14	.02	
<u>Intercorrelations among ratings:</u>								
Fitness	.34	.05	.18	.58	.34	.00	.25	
Motivation	-.04	-.22	.22	.53	.45	-.06	.19	
Growth	-.71	.11	-.39	-.61	.09	-.23	-.32	

Table 10: CORRELATION BETWEEN TSI SCORES AND RATED CAPACITY FOR GROWTH

	<u>Anderson</u>	<u>Concordia</u>	<u>Garrett</u>	<u>Southern Baptist</u>	<u>United</u>	<u>Yale</u>	<u>Total Sample</u>	<u>Pages of Manual</u>
N=	15	14	17	18	18	12	272	
for $p=.05, r=$	.50	.51	.47	.46	.46	.55	.12	
<u>D</u>	-.45	.21	.01	.39	.05	-.39	-.05	
<u>NL</u>	-.05	-.03	-.02	.07	-.31	-.08	-.06	
<u>SL</u>	.13	-.20	-.22	-.03	.16	-.52	-.08	50
<u>CC</u>	.03	-.36	-.17	.10	-.28	-.03	-.07	50
<u>FL</u>	.02	.19	.26	-.14	.32	-.14	.11	25
<u>A</u>	.01	-.25	.45	-.28	.30	.60	-.01	55,57
<u>I</u>	.09	.01	-.12	-.11	-.05	.06	.04	
<u>F</u>	-.17	-.28	.27	.24	.20	-.32	-.06	
<u>L</u>	-.39	-.11	.07	-.24	.21	.52	.04	
<u>E</u>	.30	.19	.08	.12	-.53	-.41	-.01	
<u>R</u>	-.09	.20	-.28	.27	-.24	.08	-.03	
<u>P</u>	.15	.53	.26	.21	.13	-.14	.05	
<u>Intercorrelations among ratings:</u>								
Fitness	-.70	-.63	.10	-.65	-.37	.66	-.23	
Emotional Problems	-.71	.11	-.39	-.61	.09	-.23	-.32	
Motivation	.18	-.29	-.02	-.69	.17	.32	-.06	

tsi scores in relation to personal background,
performance in seminary,
and post-seminary vocational choice

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PUBLISHED BY THE MINISTRY STUDIES BOARD AS A SUPPLEMENT TO
VOCATIONAL GUIDANCE OF THEOLOGICAL STUDENTS
A MANUAL FOR THE USE OF THE THEOLOGICAL SCHOOL INVENTORY

TSI SCORES IN RELATION TO PERSONAL BACKGROUND, PERFORMANCE IN SEMINARY, AND POST-SEMINARY VOCATIONAL CHOICE

James E. Dittes¹

This research is the first major systematic attempt to determine the relationship between the TSI scores and the following groups of variables:

(1) all of the personal information provided by Section I of the TSI, including some items which can be regarded as directly "validating" of certain TSI scales, such as reported degree of definiteness (Cf. D scale), and reported degree of family's influence (Cf. A scale).

(2) the ten items of Section III of the TSI, in which the student expresses the degree of comfort he feels in various functions of the ministry.

(3) various indices of the student's experience and performance during theological education, including faculty and field work ratings.

(4) record of the student's immediate post-seminary career, including the type of position he chooses or is assigned, and faculty estimates of his "potential effectiveness".

The analysis also has available the results of a second administration of the TSI in the students' senior year. The data relating to changes in the TSI scores are reported in TSI Research Bulletin # 4, "Changes in TSI Scores During Seminary". Use will be made in this report of certain changes in response to Section I and Section III items, as these relate to initial TSI scores.

Procedure

Sample:

From among the twenty-three theological schools which administered the TSI (Form B, scored as Form C) to the entering classes in 1959, nine were selected which were judged to be representative denominationally, theologically, and geographically.²

¹ This study was conducted by the author under the auspices of the Ministry Studies Board with valuable consultation by Frederick R. Kling on many points of design and analysis. It was partially supported financially by Educational Testing Service. It would have been impossible without the excellent work of the research associates in each of the sample seminaries: Charles F. Kemp (Brite College of the Bible), Roger Powell (Colgate Rochester Divinity School), John E. Bevan (Drew Theological School), W. Peyton Thurman (Southern Baptist Theological Seminary), William Oglesby (Union Theological Seminary, Richmond), Harry A. DeWire (United Seminary, Dayton). The author was responsible for collection of data at Yale Divinity School, with the assistance of Paul Capra.

James Vaughan assisted substantially with developing the rating scales and developed the coding categories for vocations and for college courses.

Harry F. Gollob programmed and supervised the computer work with much ingenuity and contributed to the design and analysis.

Appreciation is also expressed for the general guidance provided by the other members of the Research Council of the Ministry Studies Board, James B. Ashbrook, Kenneth H. Breimeier, Clifford E. Davis, Harry A. DeWire, and James O. Speed, Jr.

² Of these nine, two schools were not included in presently available results. Local practical difficulties made data unavailable from Northwest Lutheran. At Concordia Seminary in St. Louis such a large proportion of students were away from school on internship during 1961-62 and hence

In each of these schools two different samples were involved in the studies to be reported, one smaller sample, and one larger sample which included the smaller group. The larger sample included all of the students who entered the school in 1959 and were tested with the TSI then. The smaller sample included all of those from the larger sample for whom TSI retest data were available in the spring of 1962 or, in the case of a few scattered students, in the fall of 1962. Faculty ratings were also obtained only on this smaller sample. The reasons for the shrinkage of the sample included primarily the permanent or temporary dropout of students from the school. In some cases students declined to take the TSI again, or schedule difficulties prevented this. In some cases students had to be dropped from the smaller sample even though TSI retest data were available, because complete faculty ratings or field work ratings were not available on them. The schools and the number of students in each sample are given in the following list:

<u>School</u>	<u>Larger Sample</u>	<u>Smaller Sample</u>
Brite	41	16
Colgate Rochester	39	19
Drew	81	32
Southern Baptist	105	38
Union (Richmond)	83	47
United (Dayton)	49	28
Yale	99	24

Data:

TSI data at time of entering seminary. The following data are derived from the TSI administered in 1959.

1. All scale scores.
2. The ten items of Section III.
3. Fifty-seven variables of biographical and other data from Section I of the TSI. These data were recorded in the form of the students' answers, except for certain items.

Items relating to liked and disliked college subjects, alternative vocations, and father's vocation were specially coded: College subjects were coded into one of eight categories--religion, structure of society, social-human relations, theoretical and natural science, philosophy and English, language, aesthetic, and skill courses. Vocations were coded into the following categories--social service, public service, business contact, organization, technology, outdoor, science, medicine, teaching, legal professions, literary, church, arts, entertainment, military, and international.

Items on which the student reported sources of influence (family, friends, ministers, teachers) and interest in varying fields of ministry (pastoral, missions, religious education, chaplaincy, and teaching) were not scored as single items. Rather each source of influence and each field of interest was scored as a separate three-point scale, ranging from "much" (influence or interest) to "little" (influence or interest), corresponding to the three answer choices available to the student. Thus the two items were used to generate nine separately analyzed scales. This analysis differs from that used in an earlier research¹ but produced results similar to the earlier study.

Changes in TSI results between 1959 and 1962 testings.

1. Changes in scale scores. (Analysis of those data are reported chiefly in TSI RB # 4.)
2. Changes in individual items of Section III.
3. Changes in certain information given in Section I: (1) definiteness of decision for the ministry; (2) changes in relative interests in each of five fields of the ministry (item 51).

did not graduate in 1962, that it was not possible to obtain TSI retest data, placement information, or faculty ratings for a large majority. All of the follow-up data and analysis is now being conducted on the sample of about 100 students from Concordia and will be reported subsequently.

¹ See TSI Research Bulletin # 1.

Record of seminary experience.

1. Whether or not a student engaged in extended personal counseling or other intensive personal experience.
2. Whether or not a student participated in full-time clinical training.
3. Seminary grade average. (Transformed to standard scores, to correct for differences among schools in means and variabilities.)
4. The amount of field work student undertook during seminary and the type of work, whether as a minister, other worker in a local church, or in a non-parish situation.
5. Whether or not student had full-time internship in a parish church.

Vocational choice. The post-seminary location for each of the subjects in the larger sample was learned. These were coded into the following categories:

1. Received degree and in professional work in a local parish as minister, assistant, director of religious education, etc.
2. Received degree and engaged in professional pastoral work, not in a local parish, such as a hospital chaplaincy.
3. Received degree and in religious oriented work of a non-pastoral type, such as the teaching of religion, or in denominational administrator work. This category included graduate students working for doctorate in religion.
4. Received degree but in non-religious work. Not employed by a church or religious organization. This category was used for students working for advance degrees in fields other than religion and for women who had married except those married to clergymen.
5. Dropped from seminary without a degree.

Those still students in seminary were recorded separately. Those who transferred to another seminary were either ignored or the vocational decision was traced after completion of the new seminary.

Data in the above categories were analyzed in two ways: (1) as a scale ranging from intimate to remote involvement with parish pastoral work, and (2) separately as discrete categories.

Ratings. On the smaller sample certain ratings by faculty members were obtained. (In the analysis, these were transferred in means and variabilities.)

1. Field work performance. While consulting the file of the student's field work performance, a faculty member who also knew the student rated him, on four point scales, on each of these six categories: leadership, interpersonal relationships, responsibility, judgment, emotional adjustment, and general evaluation. Ratings tended to be highly correlated and were summed across the six scales to obtain a single estimate of field work performance.

2. Three faculty members who knew the student each rated him, on four point scales, in three categories: the degree of his involvement in the life and work of the seminary; the degree of his growth and maturity during seminary; a general estimate of his likely effectiveness as a minister. The ratings of the three faculty members were summed for each of these three scales.

Analysis:

Product-moment correlations among these data were calculated. This was done separately for the larger sample, with all of the data available for it, and for the smaller sample, for whom all variables were available. Correlations were calculated for the complete sample of seven schools. Correlations were also calculated separately for each school, because there appeared to be substantial likelihood of differences among schools in the relation of TSI and other variables. Analysis in the separate schools is reported only for the major criterion variables (Tables 1-10) and in a few special cases where important differences appeared (Table 21).

The analysis also yielded intercorrelations among the TSI scales. These are reported in Appendix IV of the manual.

Results

Results are presented in the tables as indicated in the chart below. Each table includes reference to page numbers in the manual on which the results are discussed.

Table #:

Section A	Correlation in different schools between TSI scores and:
1	drop-out of school (large sample).
2	placement index (large sample).
3	post-seminary vocational decision (large sample).
4	and choice of field work assignments during theological education.
5	composite field work ratings.
6	faculty ratings.
7	grades in different schools.
8	whether or not student engaged in full-time one-year church internship.
9	whether or not student engaged in full-time clinical training.
10	whether or not student had extended personal counseling or similar intensive experience during theological education.
Section B	Correlation between TSI scales and:
11	selected personal data
12	interest in type of ministry.
13	influences and determination of choice for ministry.
14	rated effectiveness in ministerial demands.
15	course preferences.
16	father's vocation.
17	alternative vocational choice.
18	miscellaneous items.
Section C	Special tables:
19	Variables associated with a "conservative-liberal" factor.
20	Correlations of <u>L</u> (Leadership success) score with selected Section III items.
21	Correlations between <u>P</u> (Service to Persons) score and selected variables supporting first interpretation of <u>P</u> .

Notes on correlations:

The following notes should be considered in connection with the correlations presented in this study, and also the studies reported in TSI Research Bulletins # 1 and # 4.

All statistically significant results are presented. The tables present all of the statistically significant correlations found in the study, except for correlations within single schools where these do not appear as part of a meaningful pattern. Taking the total samples of these studies, there are no correlations meeting the .05 level of significance which are not reported. No inconvenient data have been withheld.

This fact is emphasized so that the reader may feel somewhat more confident in trusting the reported correlations - and the interpretations in the manual based upon them - even though they are

generally small. Their small magnitude should not suggest that they are chance congruences with an interpretation which are offset by contradictory, but unreported results.

Many correlations are with dichotomous or skewed variables. Although all correlations are Pearson r 's, the assumptions of this statistic are violated by many of the variables to which it has been applied. Many of the variables are dichotomous, with no underlying continuity easily postulated. For example, whether a student enters the parish ministry, whether his father is living, whether he lists law as a possible alternative vocation. Furthermore, many of these dichotomous variables, as well as others based on a more extended scale, are highly skewed. These include the above examples and also such data as self-rating of physical health, and number of children. Use of the Pearson r with such data distorts the true relationship, in most instances making the reported correlation appear lower than it actually is.

Table 1: CORRELATION IN DIFFERENT SCHOOLS BETWEEN TSI SCORES AND DROP-OUT OF SCHOOL
(LARGE SAMPLE)

	<u>Brite</u>	<u>CRDS</u>	<u>Drew</u>	<u>Southern Baptist</u>	<u>Union</u>	<u>United</u>	<u>Yale</u>	<u>Total Sample</u>	<u>Pages of Manual</u>
N =	41	39	81	105	83	49	99	497	
for $p = .05$, $r =$	.30	.31	.22	.19	.22	.28	.20	.09	
<u>D</u>	.23	.23	-.20	-.05	-.06	-.27	-.26	-.11	19
<u>NL</u>	-.01	-.03	-.19	-.01	-.12	-.13	-.08	-.09	22
<u>SL</u>	.50	.17	-.08	-.24	.07	.05	-.06	-.03	
<u>CC</u>	.25	.11	-.02	-.09	-.02	-.12	.14	-.03	
<u>FL</u>	-.19	.06	-.02	.04	-.09	.08	-.09	.01	
<u>A</u>	-.29	-.20	-.09	.10	-.07	-.05	-.11	-.07	
<u>I</u>	-.07	-.05	.19	.17	.03	-.01	.06	.07	58
<u>F</u>	.23	.23	-.08	-.32	.16	-.05	-.03	-.02	61
<u>L</u>	.02	-.17	-.12	.03	-.05	-.06	-.04	-.02	
<u>E</u>	.26	.05	-.14	-.08	.01	-.06	-.03	-.04	63
<u>R</u>	-.27	-.05	.15	.03	.01	.33	.09	.06	65
<u>P</u>	-.11	.01	.12	.06	-.19	.09	.05	.03	

Table 2: CORRELATION IN DIFFERENT SCHOOLS BETWEEN TSI SCORES AND PLACEMENT INDEX*
(LARGE SAMPLE)

	<u>Brite</u>	<u>CRDS</u>	<u>Drew</u>	<u>Southern Baptist</u>	<u>Union</u>	<u>United</u>	<u>Yale</u>	<u>Total Sample</u>	<u>Pages of Manual</u>
N =	41	39	81	105	83	49	99	497	
for p = .05, r =	.30	.31	.22	.19	.22	.28	.20	.09	
<u>D</u>	.26	-.20	.20	.08	.16	.29	.22	.15	19
<u>NL</u>	-.11	.00	.15	-.03	.10	.07	.15	.08	22
<u>SL</u>	-.43	-.18	.09	.40	.02	.04	.20	.12	23
<u>CC</u>	-.15	-.16	.04	.10	.11	.21	-.05	.10	
<u>FL</u>	.16	.06	-.05	-.02	.03	-.19	.00	-.06	
<u>A</u>	.43	.12	.12	-.20	.00	.06	.21	.08	
<u>I</u>	.07	.10	-.20	-.13	-.07	-.06	-.17	-.12	58
<u>F</u>	-.19	-.20	.08	.44	-.13	.14	.10	.08	28,61
<u>L</u>	-.14	.20	.10	-.13	-.08	.00	.06	-.03	
<u>E</u>	-.18	-.16	.16	.13	.09	.13	.05	.10	63
<u>R</u>	.23	.18	-.16	.07	.04	-.40	-.16	-.06	31,65
<u>P</u>	.01	-.06	-.13	-.10	.20	-.14	-.04	-.05	

* Placement index is devised by assuming that post-seminary placement ranges along a single scale with drop-outs scored as 1, non-religious work scored as 2, non-pastoral religious work scored as 3, non-parish pastoral work scored as 4, and parish ministry scored as 5. See text and footnote to Table 3 for further definitions of these categories.

Table 3: CORRELATION IN DIFFERENT SCHOOLS BETWEEN TSI SCORES AND POST-SEMINARY VOCATIONAL DECISION

	Brite	CRDS	Drew	South. Bapt.	Union	United	Yale	Total Sample	Pages of Manual
N=	41	39	81	105	83	49	99	497	
for $p=.05, r=$	.30	.31	.22	.19	.22	.28	.20	.09	
<u>D</u>	-.08	.08	.02	.10	.25	.25	.06	.12	19
	--	--	-.06	.10	--	.11	-.16	-.04	
	-.04	.14	-.26	-.11	-.14	.01	.08	-.05	
	.11	--	--	.09	.01	--	-.03	-.05	
<u>NL</u>	-.09	-.10	-.04	.05	.19	-.03	.10	.01	22
	--	--	-.09	.15	--	.16	-.04	.06	
	-.03	-.04	-.02	.17	.09	.16	.07	-.03	
	.30	--	--	-.02	.16	--	-.13	-.09	
<u>SL</u>	-.05	-.11	-.02	.26	.08	.20	.14	.10	23
	--	--	-.07	.09	--	-.14	-.11	-.04	
	-.16	.03	-.19	-.26	-.21	-.09	-.01	-.12	
	.00	--	--	-.10	-.02	--	-.20	-.12	
<u>CC</u>	.02	-.04	-.02	.11	.09	.34	-.04	.07	
	--	--	-.02	.17	--	.13	-.04	.02	
	.00	.34	-.23	.00	-.14	-.05	.10	.01	
	-.21	--	--	.03	-.18	--	-.20	-.15	
<u>FL</u>	.04	.13	-.10	-.04	-.07	-.32	-.14	-.10	25
	--	--	.20	-.03	--	-.06	.07	.05	
	.14	-.44	.16	-.15	.01	.18	-.05	-.04	
	-.04	--	--	-.04	.09	--	.09	.09	
<u>A</u>	.40	.05	.18	-.17	.06	.04	.21	.08	
	--	--	-.04	.15	--	.00	.04	.02	
	-.24	.43	-.08	.03	.05	-.14	.05	.01	
	-.05	--	--	.18	.14	--	-.14	-.01	
<u>I</u>	.05	.10	.01	-.14	-.07	-.09	-.09	-.07	58
	--	--	.09	-.10	--	.05	-.10	.00	
	.04	-.18	.24	-.12	.18	.31	-.07	.02	
	.00	--	--	-.07	-.06	--	.20	.12	
<u>F</u>	-.16	-.08	-.06	.24	-.04	.27	.02	.06	28, 61
	--	--	-.03	.08	--	-.27	-.02	-.04	
	-.08	-.17	-.22	-.02	-.06	-.14	.01	-.06	
	-.12	--	--	.03	.10	--	-.13	-.10	
<u>L</u>	-.10	.18	.07	-.06	-.09	-.10	.08	-.01	62
	--	--	-.06	.08	--	.29	.12	.08	
	-.01	-.03	.07	.18	.25	.05	-.05	.07	
	.28	--	--	.09	.11	--	.02	.10	
<u>E</u>	.12	-.22	.05	.13	.07	.23	-.08	.06	63
	--	--	-.04	.02	--	-.01	-.04	-.02	
	.11	.32	-.14	-.08	-.27	-.07	.13	.00	
	-.16	--	--	-.01	-.04	--	-.14	-.13	
<u>R</u>	-.09	.33	-.12	.02	.00	-.46	-.06	.01	31, 65
	--	--	-.01	-.18	--	.07	.08	-.02	
	.14	-.25	-.05	-.14	-.02	-.04	.08	.02	
	-.10	--	--	-.12	-.06	--	.09	.06	
<u>P</u>	-.20	-.22	-.10	-.12	.07	-.23	-.05	-.09	67
	--	--	.06	-.08	--	.00	.02	.01	
	.08	-.11	.13	.17	-.04	-.02	-.26	-.02	
	.08	--	--	-.16	-.14	--	.10	.02	

First line represents correlation with whether student entered any form of ministry in a local parish.

Second line represents correlation with whether student entered a form of pastoral ministry, such as a hospital chaplaincy, not in a local parish.

Third line represents correlation with whether student entered a non-pastoral form of religious work, such as teaching of religion.

Fourth line represents correlation with whether student entered work not specifically connected with religion or a religious institution.

Blanks indicate no students from that school entered that category of placement.

Table 4: CORRELATION IN DIFFERENT SCHOOLS BETWEEN TSI SCORES AND CHOICE OF FIELD WORK ASSIGNMENTS DURING THEOLOGICAL EDUCATION

	Brite	CRDS	Drew*	South. Bapt.	United	Yale	Total	Manual Pages
N= for $p=.05$, $r=$	16 .48	19 .44	32 .34	38 .32	28 .37	24 .40	204 .13	
<u>D</u>	.36 -.09 .06	.44 .04 -.21	.28 -.30	.01 -.06 .20	.14 -.27 .15	-.47 .33 -.09	.12 -.15 -.19	19
<u>NL</u>	.40 .02 -.29	-.11 .31 -.25	.17 -.01	.02 -.16 .31	-.42 .28 .14	.28 -.06 -.08	-.03 .02 -.08	
<u>SL</u>	.38 -.32 -.25	.76 -.40 -.32	-.13 -.12	.26 -.25 -.13	.49 -.39 -.24	-.23 .40 -.43	.20 -.16 -.28	23
<u>CC</u>	.00 .08 -.04	.40 .02 -.16	.06 -.16	.14 -.05 .03	.21 -.35 .06	.25 .08 -.39	.04 -.16 -.25	
<u>FL</u>	.11 -.25 .25	-.48 -.13 .33	-.18 -.06	-.06 .14 .19	-.05 -.17 .20	.15 -.01 -.02	-.14 .05 .24	25, 54
<u>A</u>	-.09 .21 -.23	.07 .31 -.16	-.26 .35	-.19 .07 .21	.03 .03 .00	.16 -.04 .00	-.05 .17 .08	55
<u>I</u>	-.08 -.04 -.24	-.61 -.05 .50	-.10 .12	.10 .10 -.06	-.07 -.04 .01	.18 .01 .10	-.16 .10 .24	58
<u>F</u>	.07 .08 .46	.50 -.04 -.22	.16 -.25	.15 -.20 -.09	.44 -.48 -.08	-.48 .20 -.06	.18 .16 .15	28
<u>L</u>	-.35 .44 -.06	-.31 -.09 .56	.00 .22	-.35 .03 .29	-.43 .33 .22	.30 -.38 .25	-.24 .13 .26	62
<u>E</u>	.39 -.37 .31	.42 .11 -.45	.11 -.25	.34 -.19 -.08	.14 .02 .03	-.35 .19 -.12	.16 -.17 -.27	30
<u>R</u>	.40 -.43 -.25	-.31 -.29 .42	-.01 -.13	-.02 .07 -.40	-.01 -.02 .03	-.02 -.13 .30	.08 -.04 .12	
<u>P</u>	-.32 .10 -.23	.14 -.07 -.38	-.04 .07	-.22 .30 .09	-.10 .16 -.20	.29 .11 -.34	-.04 .05 -.15	68

In each cell, the first line gives correlation with the number of field work units as a minister. The second line, with the number of field work units in a parish church, as assistant, youth worker, etc. (other than as the minister). The third line gives correlation with the number of field work units other than in a parish church.

* Blank space means information not reported for that school.

Table 5: CORRELATION IN DIFFERENT SCHOOLS BETWEEN TSI SCORES AND
COMPOSITE FIELD WORK RATINGS

	<u>Brite</u>	<u>CRDS</u>	<u>Drew</u>	<u>Southern Baptist</u>	<u>Union</u>	<u>United</u>	<u>Yale</u>	<u>Total Sample</u>	<u>Pages of Manual</u>
N =	16	19	32	38	47	28	24	204	
for p = .05, r =	.48	.44	.34	.32	.28	.37	.40	.13	
<u>D</u>	.36	-.30	.12	.00	-.07	-.28	-.13	-.06	
<u>NL</u>	.25	-.15	.39	-.05	.11	-.14	.28	.10	22
<u>SL</u>	.12	-.47	-.04	.07	-.02	.01	.08	-.03	
<u>CC</u>	-.13	-.17	.12	-.25	-.10	-.10	.25	-.05	
<u>FL</u>	.34	-.08	-.03	.14	.01	-.04	-.12	.02	
<u>A</u>	.34	.36	.16	-.09	.26	.04	-.37	.10	56
<u>I</u>	-.16	.11	.01	.02	.23	.39	-.38	-.01	
<u>F</u>	.21	-.11	-.16	-.06	-.15	-.05	-.16	-.09	
<u>L</u>	.33	.29	.15	-.04	-.13	.24	-.07	.06	
<u>E</u>	-.09	-.56	.06	.08	-.10	-.17	.19	-.06	63
<u>R</u>	-.28	.07	-.07	.04	-.09	.04	.17	.00	
<u>P</u>	-.36	.30	-.13	-.15	-.06	.14	.50	.02	

Table 6: CORRELATION IN DIFFERENT SCHOOLS BETWEEN TSI SCORES AND FACULTY RATINGS*

	Brite	CRDS	Drew	South. Bapt.	Union	United	Yale	Total	Manual Pages
N= for $p=.05, r=$	16 .48	19 .44	32 .34	38 .32	47 .28	28 .37	24 .40	204 .13	
<u>D</u>	.27 .07 .33	-.65 -.54 -.67	-.13 .05 -.08	-.13 -.12 -.20	-.15 .12 -.07	-.10 -.02 .13	-.38 -.31 -.15	-.17 -.08 -.10	20, 48
<u>NL</u>	.42 .21 .33	-.14 .02 -.12	.00 .29 .10	.02 -.06 -.09	.17 -.02 .05	.17 .17 .07	.08 -.17 .15	.09 .06 .06	22
<u>SL</u>	.13 -.07 .14	-.48 -.48 -.37	-.02 .08 .10	.15 .26 .14	-.12 .09 -.10	.12 .13 .18	.10 .09 .20	-.02 .05 .03	
<u>CC</u>	-.09 -.17 -.01	-.27 -.36 -.41	-.04 .12 .05	.10 .19 .05	-.20 -.09 -.15	-.17 .04 .16	.13 .14 .12	-.06 .01 -.01	
<u>FL</u>	.25 .36 .25	.36 .28 .29	.21 .14 .00	.03 -.02 .04	.16 .05 .15	.14 -.05 .21	.19 .27 .26	.15 .09 .13	25, 54
<u>A</u>	.28 .22 .42	-.07 -.04 -.11	-.10 -.27 .12	.02 -.12 -.02	.23 .18 .15	-.24 -.02 .08	-.18 .01 -.22	.01 -.01 .07	56
<u>I</u>	.02 .04 -.15	.46 .10 .24	.03 -.14 -.06	.02 .06 -.10	.20 .16 .17	.01 .02 -.05	.11 -.03 -.33	.17 .03 .01	27
<u>F</u>	.17 .28 .21	-.43 -.26 -.31	-.12 .18 -.01	-.12 .06 -.05	-.23 -.15 -.07	-.21 .11 .38	-.34 -.23 -.27	-.19 -.01 -.05	60
<u>L</u>	.42 .46 .37	.41 .16 .06	-.26 -.22 -.17	-.25 -.15 -.25	.10 -.17 .04	.16 .24 .14	-.23 -.19 -.12	.01 -.03 -.02	
<u>E</u>	-.01 -.14 .08	-.66 -.48 -.40	.07 .18 .08	.35 .12 .38	-.19 .01 -.20	-.27 -.12 -.16	-.11 -.14 .05	-.06 -.04 -.02	63
<u>R</u>	-.32 -.46 -.35	.50 .33 .41	.30 .06 -.03	.03 -.02 -.04	-.03 .04 -.19	.10 -.22 -.07	-.04 -.10 .15	.07 -.03 -.01	31
<u>P</u>	-.43 -.29 -.56	.29 .58 .41	.09 -.05 -.10	.07 .15 .09	-.07 -.11 .04	.02 -.13 -.16	.43 .49 .64	.05 .07 .06	68

*In each cell, the first line presents correlation with rating of involvement.
the second line presents correlation with rating of growth during seminary.
the third line presents correlation with rating of potential effectiveness in the ministry.

Table 7: CORRELATION IN DIFFERENT SCHOOLS BETWEEN TSI SCORES AND GRADES

	<u>Brite</u>	<u>CRDS</u>	<u>Drew</u>	<u>Southern Baptist</u>	<u>Union</u>	<u>United</u>	<u>Yale</u>	<u>Total Sample</u>	<u>Pages of Manual</u>
N =	16	19	32	38	47	28	24	204	
for p = .05,									
r =	.48	.44	.34	.32	.28	.37	.40	.13	
<u>D</u>	.14	-.70	-.12	.16	-.14	.18	.00	-.06	
<u>NL</u>	.40	-.07	.22	-.13	.12	-.02	.18	.08	
<u>SL</u>	.20	-.34	-.19	-.02	-.29	-.25	-.04	-.19	47,50
<u>CC</u>	.03	-.49	-.13	-.33	-.25	.13	-.06	-.17	47,50
<u>FL</u>	.39	.44	.22	.40	.24	-.19	-.08	.25	54
<u>A</u>	.28	-.46	-.02	.05	.18	.12	-.51	.03	55
<u>I</u>	.03	.57	.15	.22	.37	-.46	.22	.22	27
<u>F</u>	-.02	-.44	-.13	-.19	-.16	.21	-.16	-.15	60
<u>L</u>	.10	.33	-.12	.02	.30	.12	-.28	.08	
<u>E</u>	.06	-.42	-.06	-.07	-.35	.29	.05	-.12	47,63
<u>R</u>	-.04	.62	.23	.02	-.30	-.28	.30	.08	31
<u>P</u>	-.30	.09	.01	.04	-.12	-.08	.16	-.04	

Table 8: CORRELATION IN DIFFERENT SCHOOLS BETWEEN TSI SCORES AND WHETHER OR NOT STUDENT ENGAGED IN FULL-TIME ONE-YEAR CHURCH INTERNSHIP

	<u>CRDS</u>	<u>Drew</u>	<u>South. Baptist</u>	<u>Union</u>	<u>Pages of Manual</u>
N =	19	32	38	47	
for $p = .05$, $r =$.44	.34	.32	.28	
<u>D</u>	-.51	-.31	.15	.02	25
<u>NL</u>	.09	-.18	.26	-.08	
<u>SL</u>	-.24	-.30	.19	-.01	
<u>CC</u>	-.16	-.32	.17	-.01	
<u>FL</u>	.23	.36	-.06	.06	
<u>A</u>	-.27	-.01	.14	-.13	
<u>I</u>	.32	.38	-.22	-.09	
<u>F</u>	-.20	-.30	.08	-.03	
<u>L</u>	-.18	-.09	.14	.14	
<u>E</u>	-.07	-.29	.11	.08	
<u>R</u>	.29	.36	-.11	-.02	
<u>P</u>	.17	.13	-.15	.14	

Table 9: CORRELATION IN DIFFERENT SCHOOLS BETWEEN TSI SCORES AND WHETHER OR NOT STUDENT IS ENGAGED IN FULL-TIME CLINICAL TRAINING

	<u>Southern Baptist</u>	<u>Union</u>	<u>Yale</u>	<u>Pages of Manual</u>
N =	38	47	24	
for $p = .05$, $r =$	.32	.28	.40	
<u>D</u>	-.57	-.04	-.10	48
<u>NL</u>	.03	-.19	.11	
<u>SL</u>	-.12	-.14	-.21	50
<u>CC</u>	-.50	-.14	-.04	50
<u>FL</u>	.40	.06	-.26	24
<u>A</u>	-.10	-.09	.04	
<u>I</u>	.00	.25	-.05	
<u>F</u>	-.18	-.17	.00	
<u>L</u>	-.08	.16	.05	
<u>E</u>	-.09	-.06	.20	
<u>R</u>	.13	-.19	-.25	66
<u>P</u>	.24	.04	.02	67

Table 10: CORRELATION IN DIFFERENT SCHOOLS BETWEEN TSI SCORES AND WHETHER OR NOT
STUDENT HAD EXTENDED PERSONAL COUNSELING OR SIMILAR INTENSIVE EXPERIENCE
DURING THEOLOGICAL EDUCATION

	<u>Brite</u>	<u>CRDS</u>	<u>Drew</u>	<u>Union</u>	<u>United</u>	<u>Yale</u>	<u>Total Sample</u>	<u>Pages of Manual</u>
N =	16	19	32	47	28	24	204	
for p = .05, r =	.48	.44	.34	.28	.37	.40	.13	
<u>D</u>	-.07	-.42	-.14	.07	-.58	.26	-.18	48
<u>NL</u>	-.04	.22	-.01	-.05	-.31	-.30	-.07	
<u>SL</u>	.07	-.38	-.12	.04	-.10	.52	-.19	50
<u>CC</u>	.01	-.12	-.21	.06	-.38	.45	-.25	50
<u>FL</u>	.16	-.20	.19	.11	-.24	-.04	.10	
<u>A</u>	-.02	.11	-.23	-.11	.22	-.10	.00	
<u>I</u>	.09	.14	.50	.17	.16	-.09	.25	59
<u>F</u>	.21	.14	.11	-.17	-.13	.00	-.06	
<u>L</u>	.18	.50	-.03	.11	-.04	-.25	.14	62
<u>E</u>	-.43	-.31	-.23	.13	-.05	.37	-.23	30
<u>R</u>	-.18	-.25	-.03	-.14	-.14	-.05	-.04	
<u>P</u>	.27	.03	.09	-.08	-.04	.20	.07	

Table 11: CORRELATION BETWEEN TSI SCALES AND SELECTED PERSONAL DATA

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Age</u>	.21	-.03	-.37	.23	-.14	-.21	-.14	.28	-.33	.24	-.01	.02
<u>Married</u>	.19	.00	.24	.13	-.15	-.09	-.14	.15	-.18	.18	.05	-.09
<u>Number of children</u>	.17	.00	.34	.14	-.21	-.16	-.09	.20	-.26	.21	.03	-.03
<u>Definiteness of decision</u>	.67	.23	.30	.23	-.20	-.18	-.26	.20	.19	.36	-.03	-.03
<u>Change in definiteness</u>	-.36	-.08	-.10	-.15	.20	.06	.22	-.09	.13	-.22	-.02	-.01
<u>Father a college graduate</u>	-.06	-.02	-.16	-.07	.03	.16	.17	-.18	.19	-.15	.01	-.06
<u>Mother a college graduate</u>	-.10	-.01	-.13	-.07	.12	.15	.18	-.21	.13	-.14	-.00	-.01
<u>Size of home town</u>	-.01	.15	-.11	-.14	.04	.02	.02	-.10	.13	-.12	.05	.10

Pages of manual on which results are discussed:	19	21 22	23 50	50	24	26 55	27 58	28 60	29 62	30 64		67

Table 12: CORRELATION BETWEEN TSI SCALES AND INTEREST IN TYPE OF MINISTRY (ITEM 51)

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Parish ministry</u>	.26	.10	.20	.20	-.08	.01	-.40	.24	-.14	.25	-.11	.08
<u>Missions</u>	.20	.09	.17	.20	-.23	-.18	-.18	.09	-.19	.29	.10	-.06
<u>Ministry of religious education</u>	.10	.03	.00	-.04	-.13	-.04	-.03	-.02	.06	-.05	-.07	.16
<u>Chaplaincy</u>	-.02	.02	.01	.02	-.01	.08	-.10	.12	.00	.05	.02	.04
<u>Teaching ministry</u>	-.20	-.14	-.11	-.16	.21	-.08	.50	-.13	.06	-.16	.11	-.13

Pages of manual on which results are discussed:	19 48	49	23		54	55	54 58	28 60	62	30	65	32

Table 13: CORRELATION BETWEEN TSI SCALES AND INFLUENCES ON CHOICE FOR MINISTRY

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Influenced by: (item 52)</u>												
<u>Family</u>	-.07	-.05	-.04	-.10	-.12	.33	-.10	-.03	.05	-.02	-.11	-.13
<u>Friends</u>	-.08	.01	-.06	-.05	-.12	.22	-.03	-.22	.10	.01	-.09	-.02
<u>Ministers</u>	.17	.16	.00	.12	.02	-.18	-.15	.16	-.00	.10	-.01	.04
<u>Teachers</u>	-.07	.14	-.17	-.04	.19	-.10	.21	-.12	.13	-.14	.06	.06
<u>Age of first decision</u>	.16	-.07	.24	.19	-.13	-.22	-.02	.19	-.19	.10	.01	.00
<u>Age of final decision</u>	.03	-.18	.17	.07	-.09	-.16	.04	.13	-.17	-.02	-.02	.10
<u>Father's activity in home church</u>	-.13	-.01	-.11	-.12	-.03	.26	.15	-.20	.06	-.06	-.09	-.11
<u>Mother's activity in home church</u>	-.13	.01	-.22	-.14	.01	.31	-.02	-.19	.17	-.10	-.07	-.03
<u>Rated adequacy of church relig. training</u>	.21	.20	.00	.17	-.17	.03	-.19	.04	.06	.10	-.11	.03
<u>Number of friends in ministry</u>	.21	.13	.23	.11	-.15	.00	-.12	.11	-.14	.27	-.08	-.17
<u>Previous vocational experience</u>	.22	-.07	.39	.28	-.19	-.23	-.17	.32	-.34	.29	.05	-.02
<u>Previous professional parish experience</u>	-.16	.17	.22	.14	-.14	-.06	-.23	.08	-.12	.28	.08	-.07
<u>Father in church vocation</u>	.12	-.10	-.13	-.20	.10	.18	.20	-.26	.09	-.18	-.05	.09

Pages of manual on which results are discussed:	19	21 22 49	51 61	61	54	26 55	27 58 59	61	29 62	30	65	67

Table 14: CORRELATION BETWEEN TSI SCALES AND RATED EFFECTIVENESS IN MINISTERIAL DEMANDS

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Dynamic leadership</u>	.12	.46	.06	.15	-.08	-.21	-.22	.11	-.08	.20	.08	.09
<u>Administration</u>	.20	.11	.01	.15	-.30	-.05	-.03	.04	.09	.14	-.14	-.11
<u>Public speaker</u>	.09	.42	.00	-.05	.07	-.09	-.03	.02	.00	.06	.06	-.01
<u>Social and racial</u>	-.00	.08	-.05	-.04	.21	-.15	-.02	-.06	.01	-.05	.20	.10
<u>Restricted intellect</u>	.19	.07	.06	.17	-.20	-.15	-.20	.03	.11	.18	.05	.06
<u>Personality differences</u>	-.04	.13	-.04	-.05	.18	-.20	-.04	-.02	-.03	-.07	.12	.28
<u>Personal sacrifice</u>	.28	.14	.11	.23	-.06	-.24	-.16	.26	-.13	.24	.02	-.13
<u>Physical-mental illness</u>	.02	.05	.05	.12	.00	-.00	-.14	.06	-.11	.04	.05	.16
<u>Personal habits</u>	.18	.21	.08	.09	-.09	-.09	-.20	.10	-.03	.12	.00	.00
<u>Scholarly interests</u>	-.08	.01	-.10	-.15	.24	-.05	.37	-.11	.02	-.10	.08	-.13
<hr/>												
Pages of manual on which results are discussed:	19 48	21	23		54	55	27 58	60 61	62		31 65	31 32

Table 15: SIGNIFICANT CORRELATION BETWEEN TSI SCALES AND PREFERENCES FOR COLLEGE COURSES

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>E</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Dislike physical education</u>		-.14					-.14					
<u>Dislike natural science</u>					.18							
<u>Dislike structure of society</u>						-.14						
<u>Like structure of society</u>					-.23							
<u>Like physical education</u>					.36		.40			-.18		
<u>Like religion</u>						.17	-.11			.15		-.11
<u>Like social-human relations</u>							-.24					.11
<u>Like skills</u>			.20	.15			-.12			.14		
<u>Like art</u>			-.19			.19						
<hr/>												
Pages of manual:					24	55 56	59			30 55		32

Table 16: SIGNIFICANT CORRELATION BETWEEN TSI SCALES AND FATHER'S VOCATION

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Church</u>				-.20		.18	.20	-.26		-.18		
<u>Teacher</u>		.15									.16	
<u>Arts</u>						.14						
<u>Outdoor</u>			.15		-.18		-.14	.17	-.16	.18		
<u>Public service</u>				.15								
<hr/>												
Pages of manual on which results are discussed:		22 49				56		61		30		32

Table 17: SIGNIFICANT CORRELATION BETWEEN TSI SCALES AND ALTERNATIVE VOCATIONAL CHOICE

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Outdoor</u>				.18	-.20		-.22			.19		
<u>Arts</u>				-.14		.20		-.15			.15	
<u>Law</u>							.17			-.16		
<u>Public service</u>				.17		.09						
<u>Teaching</u>	-.18	-.14	-.14									
<u>Entertainment</u>			-.15								.15	
<u>Military</u>			.14									
<u>Social service</u>						-.11						.20
<u>Business contact</u>												.13
<hr/>												
Pages of manual on which results are discussed:	48	49				56	59			30	31	32

Table 18: SIGNIFICANT CORRELATION BETWEEN TSI SCALES AND MISCELLANEOUS ITEMS

		Page of manual on which results are discussed:
Between <u>D</u> (Definiteness) and		
Self-rating of emotional adjustment	.22	19
Others from home church in ministry	-.14	
Between <u>NL</u> (Natural Leading) and		
Self-rating of emotional adjustment	.21	21, 22
Self-rating of physical health	.15	
Others from home church in ministry	-.18	
Between <u>SL</u> (Special Leading) and		
Self-rating of physical health	-.14	51
Change of denomination	.17	
Between <u>FL</u> (Flexibility) and		
First-born	.18	54
Between <u>A</u> (Acceptance by others) and		
Rated adequacy of home religious training	.28	
Between <u>I</u> (Intellectual concern) and		
Previous seminary education	.16	27, 58
Increased interest in parish ministry	.19	
Increased interest in teaching	-.14	
Choice of curriculum in "teaching and research" over curriculum in parish ministry (Yale sample only)	.48	
Between <u>L</u> (Leadership success) and		
First-born	.09	62
Still a student after three years	-.14	
Between <u>P</u> (Service to Persons) and		
Parents separated or divorced	.16	68

Table 19: VARIABLES ASSOCIATED WITH A "CONSERVATIVE-LIBERAL" FACTOR

	"Conservative" scales					Rated conservativeness of home church	"Liberal" scales	
	<u>CC</u>	<u>SL</u>	<u>E</u>	<u>D</u>	<u>F</u>		<u>FL</u>	<u>L</u>
<u>CC</u> score		.64	.64	.47	.41	.10	-.39	-.44
<u>SL</u> score	.64		.60	.44	.41	.16	-.26	-.53
<u>E</u> score	.64	.60		.45	.35	.17	-.37	-.58
<u>D</u> score	.47	.44	.45		.41	.02	-.26	-.23
<u>F</u> score	.41	.41	.35	.41		.11	-.21	-.33
Rated conservativeness of home church	.10	.16	.17	.02	.11		-.03	-.21
<u>FL</u> score	-.39	-.26	-.37	-.26	-.21	-.03		.04
<u>L</u> score	-.44	-.53	-.58	-.23	-.33	-.21	.04	
Age on entering seminary	.23	.37	.24	.21	.28	.15	-.14	-.33
Married on entering seminary	.13	.24	.18	.19	.15	.22	-.15	-.18
Married during seminary	-.05	-.17	-.03	-.04	.01	-.05	.08	.02
Number of children	.14	.35	.21	.17	.20	.17	-.21	-.26
Self-rating of physical health	-.06	-.14	-.07	.02	-.11	.00	-.07	.11
Age of first consideration of ministry	.19	.24	.10	.16	.19	.04	-.13	-.19
Previous vocational experience	.28	.39	.29	.22	.32	.13	-.19	-.34
Previous professional parish experience	.14	.22	.28	.16	.08	.20	-.14	-.12
Previous change of denomination	.08	.17	.06	-.01	.07	.10	-.04	-.06
Father's activity in home church	-.12	-.11	-.06	-.13	-.20	-.12	-.03	.06
Mother's activity in home church	-.14	-.22	-.10	-.14	-.19	-.11	.01	.17
Father in a church occupation	-.20	-.13	-.18	-.12	-.26	-.19	.10	.10
Father in outdoor occupation	.11	.16	.18	.07	.17	.20	-.18	-.16
Grades in seminary	-.17	-.19	-.12	-.06	-.15	-.13	.25	.08
Influence of teachers on decision	-.04	-.18	-.14	-.07	-.12	-.04	.19	.13
Skills courses among best liked	.15	.20	.14	.10	.09	.02	-.08	-.09
Feels comfortable about:								
Demands for scholarly interests	-.15	-.10	-.10	-.08	-.11	.01	.24	.02
Working with those with restricted intellectual interests	.17	.06	.18	.19	.03	.01	-.20	.11
Interest in parish on entering seminary	.20	.20	.25	.26	.24	.01	-.08	-.14
Choice of field work jobs as minister	.04	.20	.16	.13	.18	.17	-.14	-.24
Tendency to choose parish ministry after seminary	.11	.19	.12	.15	.07	.06	-.16	-.08
Extended personal counseling during seminary	-.25	-.19	-.23	-.18	-.05	-.15	.10	.14
Feels comfortable about making many personal sacrifices	.23	.12	.24	.28	.26	-.02	-.06	-.13
Loading on Factor 1 (conservative-liberal factor) Face Impression Study (TSI RB # 2, Table 2)	-.83	-.75	-.63	-.51	-.39		.38	.57

Pages of manual on which results are discussed:	24 50	23 50 51	30	19 47 48	28 47		24	29

For discussion of the table as a whole see pages: 46,47,48,61.

Table 20: CORRELATIONS OF L (LEADERSHIP SUCCESS) SCORE WITH SELECTED SECTION III ITEMS

	<u>On entering seminary</u>	<u>In senior year of seminary</u>
Feels comfortable about facing demands of		
Making personal sacrifices	-.13	-.16
Dealing with illness	-.11	-.14
Substantiating ministry by personal example	-.03	-.17

Table 21: CORRELATIONS BETWEEN P (SERVICE TO PERSONS) SCORE AND SELECTED VARIABLES
SUPPORTING FIRST INTERPRETATION OF P *
(LARGER SAMPLE)

	<u>Brite</u>	<u>South. Baptist</u>	<u>Union</u>	<u>Total Sample</u>
N =	41	105	83	497
for p = .05, r =	.30	.19	.22	.09
<hr/>				
D score	-.19	-.26	-.12	-.19
Definiteness of commitment	-.34	-.19	.04	-.10
E score	-.59	-.31	-.18	-.33
SL score	-.22	-.22	-.10	-.19
F score	-.41	-.27	-.32	-.35
Age	-.35	-.13	-.09	-.09
Married	-.38	-.19	-.04	-.17
Self-rating of emotional adjustment	.21	-.16	-.05	-.08
Size of home town	.40	.18	.04	.12
Activity of father in home church	-.25	-.19	.10	-.13
Influence of family on decision	-.26	-.27	-.05	-.16
Number of close friends in ministry	-.04	-.11	-.11	-.19
Others from home church in ministry	.08	.01	.18	-.04
Rated adequacy of religious training in:				
home	-.20	-.15	-.04	-.08
church	-.36	.04	-.19	.00
Rated liberalness of home church	.27	.03	-.01	.14
Enters clinical training during seminary	--	.12	.07	.03
After seminary, enters:				
parish ministry	-.20	-.13	.07	-.09
non-parish pastoral ministry	--	-.08	--	.01
non-pastoral religious work	.08	.17	-.04	-.02
non-religious work	.08	-.16	-.14	.02

* Results of this table are discussed on page 67 of the manual.

changes in tsi scores during seminary

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VOCATIONAL GUIDANCE OF THEOLOGICAL STUDENTS
A MANUAL FOR THE USE OF THE THEOLOGICAL SCHOOL INVENTORY

CHANGES IN TSI SCORES DURING SEMINARY

James E. Dittes¹

The purpose of this research was quasi-experimental, to discover more about the significance of the TSI scores by determining how the scores changed in apparent response to influences during the course of seminary education.

On a sample of 204 students from seven schools² changes in the TSI scores were correlated with five types of variables:

General effects of seminary training and/or maturing. Changes which appeared consistently strong in the entire sample could be regarded as most likely the result of three years of general maturing within the context of a theological education.

Characteristics of a particular school and its students. Insofar as different schools in the sample can be taken as representing different influences, changes which are correlated with a particular type of school can be taken as representing the result of such particular influences. Alternatively - assuming that the school may be taken more as an index of particular types of students that it attracts, rather than as an index of a particular type of influence on students - such changes may represent the changes which seminary education has on a particular type of student.

Particular individual experience during seminary. Data were obtained as to particular experiences of the student during his seminary education:

- Full-time one year church internship
- Extended personal counseling, or similar intensive experience, such as in a small group
- Full-time clinical training
- Field work as a minister
- Field work in a church, other than as a minister
- Field work other than in a parish church
- Rating of effectiveness in field work
- Faculty rating of involvement in seminary training
- Faculty rating of growth during seminary
- Faculty rating of potential effectiveness in the ministry
- Grade average during seminary

As with the preceding type of data, because this is only a correlational study and not truly experimental (students were not randomly assigned to such experiences as clinical training and field work but were allowed to choose their own) it cannot be firmly established that the changes in scores are "caused" by these particular experiences. A change in score, for example, correlated with clinical training may not firmly be regarded as the effect of the clinical training. It may simply be the change during seminary experienced by the kind of student who chooses clinical training.

¹ This study was conducted by the author, under the auspices of the Ministry Studies Board, and in conjunction with the research reported in Research Bulletin # 3, "TSI scores in relation to personal background, performance in seminary, and post-seminary vocational choice." Appreciation is expressed to the faculty research associates who contributed ably in supervising the collection of data: Charles F. Kemp (Brite College of the Bible), Roger Powell (Colgate-Rochester Divinity School), John E. Bevan (Drew Theological School), W. Peyton Thurman (Southern Baptist Theological Seminary), William Oglesby (Union Theological Seminary, Richmond), Harry A. DeWire (United Seminary, Dayton). The author was responsible for collection of data at Yale Divinity School.

² Further information concerning the nature of the sample is given in TSI Research Bulletin # 3.

Table 2: CHANGES IN TSI SCORES DURING SEMINARY

	<u>Brite</u>	<u>CRDS</u>	<u>Drew</u>	<u>South. Bapt.</u>	<u>Union</u>	<u>United</u>	<u>Yale</u>	<u>Total Sample</u>	<u>Pages of Manual</u>
<u>D</u>	.88	.47	1.84*	-1.08*	.66*	-.21	2.92*	.09	
<u>NL</u>	-.31	-1.47*	-5.22*	-2.24*	-1.90*	-2.29*	-2.33	-2.29*	49
<u>SL</u>	.63	-.58	-1.56*	-5.03*	-.09	-2.86*	-2.87*	-1.94*	23,50,51
<u>CC</u>	-1.40	-.42	-3.28*	-5.13*	-1.89*	-3.89*	-2.58*	-2.89*	50,51
<u>FL</u>	-.25	-.43	1.59*	4.05*	1.00*	3.14*	-1.25*	1.50*	54
<u>A</u>	-.31	.74	1.31*	1.53*	1.72*	2.86*	1.33*	1.48*	57
<u>I</u>	-.19	-.95*	3.13*	.63*	-1.21*	.39	-1.58*	-.35*	
<u>F</u>	-.94	-.42	-2.47*	-1.61*	-.62	-1.29*	-1.46*	-1.29*	60
<u>L</u>	2.25*	-.95	1.53*	1.61*	1.00*	1.43*	.58	1.12*	29
<u>E</u>	-3.12*	.37	-2.13*	-3.79*	-.04	-3.71*	.71	-1.75*	30,63
<u>R</u>	-1.94*	-.16	-1.00*	.84*	-.15	.39	-.42	-.15	66
<u>P</u>	3.75*	.79	4.16*	1.26*	-.72*	.43	-.46	1.09*	67,68

*Change is statistically significant at .05 level of confidence.

General changes during seminary:

Table 2 indicates that the following appear to be the major changes during seminary, fairly consistent in all of the schools:

Decrease in NL. This is interpreted (see page 49 of the manual) as possible evidence that the score represents a degree of over-confidence, possibly responding to social desirability influences. If the NL score represented a more actual "confidence in their role", one would expect seminary training to increase NL. The fact that NL is consistently decreased, suggests that the maturation of seminary years dissipates early exuberance.

Increase in A. This is interpreted (see page 56 and following of the manual) as consistent with the interpretation that a moderately high A score may represent greater maturity and less rebelliousness.

Increase in L. This is interpreted (see page 29 of the manual) as indicating the responsiveness of this score to experience in the ministry. (L tends to show a positive correlation with field work as a minister and negative correlation with field work outside the church. See Table 6.)

Decrease in SL, CC, E, and F. The general tendency is for these "conservative" scores to be decreased by seminary education. Most seminaries, at least in this sample, are probably more "liberal" than their students.

Homogenization of seminary education. The main conclusion to be reached by analyzing the effects of different types of schools on the TSI scores appears to be that seminaries are more homogeneous than their students are initially and therefore exert a moderating influence on the relatively extreme students whom they attract. Thus, for example, Colgate-Rochester and Yale decrease such scores as I (Intellectual concern) and R (Social Reform) and increase E (Evangelistic witness) - or at least resist the overall tendency to decrease E - while Southern Baptist increases I and R and decreases E!

Other results

Tables 3-9 present the correlations between changes in TSI scores and various types of data recording the students' experiences during seminary, insofar as these data were available in each seminary. Results are discussed on pages of the manual as indicated on each table.

In general, it may be suggested that the effects of internship, clinical training, and field work as a minister are to enhance the effect of the theological education on the TSI score. However, the data in Table 5 suggest the possibility that students experiencing intensive personal counseling frequently make changes in TSI scores opposite from the general trend of their classmates. This is seen in such cases as the suggestion that students counseled at Union decrease D (Definiteness) and increase P (Service to Persons), at Drew increase R (Social Reform), and at Yale increase F (Self-fulfillment) and decrease E (Evangelistic witness).

Table 10 records the relation of changes in TSI scores with the initial TSI scores. This table provides hints (discussed at several points in the manual, as indicated in the table) as to the relative stability of each of the scores and as to the patterns of transformation of motives during seminary.

Table 11 presents the correlations between changes in certain TSI scores and miscellaneous variables, mostly background information from Section I, which do not show a general enough relation with TSI scores to be included in other tables.

Tables 12-15 record for SL, E, R, and P scales how certain selected variables are related with initial scores and with changes.

Table 3: CORRELATION BETWEEN PARTICIPATION IN INTERNSHIP AND CHANGES IN TSI SCORES

	<u>CRDS</u>	<u>Drew</u>	<u>Southern Baptist</u>	<u>Union</u>
N =	19	32	38	47
for $p = .05$, $r =$	.44	.34	.32	.28
change in <u>D</u>	.20	-.01	-.11	-.09
change in <u>NL</u>	-.02	.07	-.26	.13
change in <u>SL</u>	.34	.04	-.48	-.07
change in <u>CC</u>	.10	.26	-.38	-.01
change in <u>FL</u>	-.08	-.07	.07	.05
change in <u>A</u>	-.03	.09	.01	-.08
change in <u>I</u>	-.27	.03	.34	-.04
change in <u>F</u>	.02	-.06	-.18	.19
change in <u>L</u>	.10	.06	-.19	-.06
change in <u>E</u>	.08	-.03	-.22	-.17
change in <u>R</u>	-.19	.04	-.01	.07
change in <u>P</u>	.12	-.06	.38	-.02

Table 4: CORRELATION BETWEEN PARTICIPATION IN CLINICAL TRAINING AND CHANGES IN TSI SCORES

	<u>Southern Baptist</u>	<u>Union</u>	<u>Yale</u>
N =	38	47	24
for $p = .05$, $r =$	.32	.28	.40
change in <u>D</u>	.61	-.17	.29
change in <u>NL</u>	.13	.07	-.20
change in <u>SL</u>	-.36	-.12	.09
change in <u>CC</u>	.09	-.28	-.02
change in <u>FL</u>	-.13	.23	.21
change in <u>A</u>	-.09	-.13	.17
change in <u>I</u>	.26	-.14	-.21
change in <u>F</u>	.10	.05	.08
change in <u>L</u>	.39	.09	.23
change in <u>E</u>	-.35	-.30	-.15
change in <u>R</u>	-.22	.14	.16
change in <u>P</u>	.03	.45	-.10

Table 5: CORRELATION BETWEEN EXTENDED PERSONAL COUNSELING AND CHANGES IN TSI SCORES

	<u>Brite</u>	<u>CRDS</u>	<u>Drew</u>	<u>Union</u>	<u>United</u>	<u>Yale</u>
N =	16	19	32	47	28	24
for p = .05, r =	.48	.44	.34	.28	.37	.40
change in <u>D</u>	.17	.57	-.08	-.34	.05	-.23
change in <u>NL</u>	.06	.10	.05	.00	-.07	.14
change in <u>SL</u>	.13	.34	.00	-.20	-.52	-.34
change in <u>CC</u>	.20	.11	.14	-.15	-.19	-.23
change in <u>FL</u>	-.09	-.03	.06	.02	.55	.04
change in <u>A</u>	-.09	.09	.03	.14	-.35	-.02
change in <u>I</u>	-.37	-.12	-.10	-.13	.13	.14
change in <u>F</u>	.29	-.45	-.30	.00	-.51	.34
change in <u>L</u>	.35	-.08	.19	.00	.23	.12
change in <u>E</u>	.19	.30	-.11	-.31	-.37	-.27
change in <u>R</u>	.03	-.25	.27	.14	.29	-.25
change in <u>P</u>	-.09	.22	-.05	.35	.51	-.25

Table 6: CORRELATION BETWEEN TYPE OF FIELD WORK EXPERIENCE AND CHANGES IN TSI SCORES

	Brite	CRDS	Drew	Southern Baptist	United	Yale	Total Sample
N =	16	19	32	38	28	24	204
for p = .05, r =	.48	.44	.34	.32	.37	.40	.13
change in <u>D</u>	-.03 .24 -.11	-.22 .09 .23	-.06 .16	.17 -.14 -.09	-.07 .06 -.04	-.06 .03 -.07	-.08 .05 .13
change in <u>NL</u>	-.15 .16 .56	.20 -.55 .39	-.14 .07	.04 .16 -.38	.33 -.23 -.28	-.41 .25 -.11	.04 -.10 .04
change in <u>SL</u>	.53 -.12 .28	-.37 .39 -.04	.22 -.20	-.07 .12 -.32	-.29 .02 .30	.17 .11 .04	-.06 -.01 .00
change in <u>CC</u>	.30 -.05 .10	.06 -.06 .02	-.16 .05	.03 -.01 -.34	.04 .13 -.06	-.25 .27 -.01	.00 .02 .00
change in <u>FL</u>	-.40 .15 -.18	.23 -.06 -.28	.13 .07	.03 -.08 .00	.02 .19 -.27	.04 .22 -.23	.07 .03 -.21
change in <u>A</u>	.35 -.27 .11	-.12 .14 .14	.06 -.08	-.24 .09 -.13	-.02 .11 .01	.18 -.19 .00	-.02 -.04 .03
change in <u>I</u>	-.16 -.29 .10	.06 .04 -.10	.21 -.33	-.05 -.04 .09	-.22 .12 .33	-.08 .01 .02	.06 -.05 .00
change in <u>F</u>	.14 -.03 -.44	.02 .03 -.54	.11 -.05	.10 -.05 -.18	-.27 .10 .09	.05 .32 -.10	.00 .00 -.11
change in <u>L</u>	.45 -.34 .06	-.32 .28 -.04	.17 -.19	.04 .01 -.16	.44 -.01 -.46	-.38 -.07 .12	.10 -.04 -.10
change in <u>E</u>	-.40 .40 -.42	.05 -.30 .20	-.25 .23	-.07 -.02 .06	-.07 -.08 .18	.39 .02 -.18	-.20 .03 .06
change in <u>R</u>	-.68 .60 .13	.47 -.26 -.14	-.17 .12	-.07 .22 .07	.15 -.26 -.01	.03 .09 -.30	-.05 .04 -.05
change in <u>P</u>	.10 .12 .22	-.28 .17 .44	-.11 .12	.29 -.14 .08	.06 .00 -.11	-.11 -.19 .20	.04 .09 .01

In each cell, the first line gives correlation with the number of field work units as a minister. The second line, with the number of field work units in a parish church, as assistant, youth worker, etc. (other than as the minister). The third line gives the correlation with the number of field work units other than in a parish church.

Table 7: CORRELATION BETWEEN FIELD WORK RATINGS AND CHANGES IN TSI SCORES

	<u>Brite</u>	<u>CRDS</u>	<u>Drew</u>	<u>Southern Baptist</u>	<u>Union</u>	<u>United</u>	<u>Yale</u>	<u>Total Sample</u>	<u>Pages of Manual</u>
N=	16	19	32	38	47	28	24	204	
for p = .05, r =	.48	.44	.34	.32	.28	.37	.40	.13	
Change in <u>D</u>	.04	.41	-.05	.12	.20	.25	.23	.15	20
Change in <u>NL</u>	.25	.06	-.44	.02	-.08	.39	-.07	-.02	
Change in <u>SL</u>	.11	.36	.01	.04	-.01	-.36	.16	.01	
Change in <u>CC</u>	.43	.24	.05	.17	.06	-.06	.03	.11	
Change in <u>FL</u>	-.22	-.06	.25	-.25	-.12	.10	-.04	-.03	
Change in <u>A</u>	-.53	-.43	-.20	-.02	-.03	-.12	.16	-.14	
Change in <u>I</u>	-.30	.29	.06	.16	-.11	.10	.09	.03	
Change in <u>F</u>	-.10	-.18	.04	.08	.04	-.29	.20	.00	
Change in <u>L</u>	-.23	-.15	-.22	.07	.07	.32	-.12	-.01	
Change in <u>E</u>	.45	.35	-.03	-.05	.19	.15	.07	.10	
Change in <u>R</u>	.27	-.22	.13	-.16	-.02	-.22	-.10	-.04	
Change in <u>P</u>	.54	.31	.23	.06	-.04	-.05	-.32	.08	

Table 8: CORRELATION BETWEEN FACULTY RATINGS AND CHANGES IN TSI SCORES

	Brite	CRDS	Drew	Southern Baptist	Union	United	Yale	Total Sample	Pages of Manual
N =	16	19	32	38	47	28	24	204	
for p = .05, r =	.48	.44	.34	.32	.28	.37	.40	.13	
Change in <u>D</u>	.13 .19 .12	.44 .33 .38	.04 .09 .14	.31 .37 .43	.22 .03 .16	.21 .29 .23	.44 .44 .15	.23 .22 .22	20
Change in <u>NL</u>	.26 .42 .31	.31 .08 .33	-.01 -.10 -.05	-.20 -.16 .00	.00 .02 -.02	-.05 .11 .23	-.05 .16 -.01	.00 .03 .08	
Change in <u>SL</u>	.00 .08 .01	.20 .27 .30	.10 -.01 -.19	-.17 -.13 -.12	-.03 -.06 .08	-.23 -.07 -.01	-.04 -.12 .00	-.05 -.04 -.01	
Change in <u>CC</u>	.26 .28 .29	.06 .22 .26	.20 .02 .04	-.11 -.10 .04	.05 -.05 .05	.07 .11 .03	.28 .22 .16	.09 .06 .10	50
Change in <u>FL</u>	-.17 -.20 -.10	-.21 -.18 -.09	-.03 .03 .16	.20 .31 .17	-.04 -.10 .11	.10 -.02 -.18	-.26 -.41 -.14	-.02 -.04 .00	
Change in <u>A</u>	-.44 -.42 -.48	-.14 -.25 -.33	-.03 .03 -.34	-.34 -.29 -.32	-.12 -.13 .09	-.09 -.10 .01	.32 .23 .10	-.12 -.13 -.16	
Change in <u>I</u>	-.23 -.32 -.22	-.05 -.16 .04	.10 .18 .18	.35 .27 .43	.02 -.09 -.04	-.13 .03 -.22	-.29 -.13 .22	-.01 .00 .07	
Change in <u>F</u>	-.20 -.23 -.16	-.24 .04 -.12	-.07 -.15 -.10	.16 .08 .11	.01 .10 .04	.16 -.06 .17	.11 .14 .15	.02 .02 .04	
Change in <u>L</u>	-.34 -.21 -.33	.14 .11 .30	-.15 -.08 -.11	.09 -.19 -.05	-.12 .15 .02	-.09 -.05 -.05	-.01 .04 -.13	-.06 -.02 -.03	
Change in <u>E</u>	.40 .33 .32	.41 .40 .17	-.01 .17 .03	-.28 -.02 -.22	.12 .05 .17	.10 .24 .14	.16 .18 .24	.06 .13 .08	
Change in <u>R</u>	.27 .39 .22	-.39 -.28 -.37	.09 .06 .30	.15 .22 .15	.19 -.05 .04	.01 .07 .01	.16 .24 -.10	.09 .08 .05	
Change in <u>P</u>	.51 .48 .60	.33 -.02 .29	.16 .10 .41	-.06 -.04 -.02	.08 .10 -.11	-.05 -.09 -.17	-.22 -.38 -.42	.07 .03 .11	68

In each cell, the first line presents correlation with rating of involvement during seminary.
the second line presents correlation with rating of growth during seminary.
the third line presents correlation with rating of potential effectiveness in the ministry.

Table 9: CORRELATION BETWEEN GRADES AND CHANGES IN TSI SCORES

	<u>Brite</u>	<u>CRDS</u>	<u>Drew</u>	<u>Southern Baptist</u>	<u>Union</u>	<u>United</u>	<u>Yale</u>	<u>Total Sample</u>	<u>Pages of Manual</u>
N =	16	19	32	38	47	28	24	204	
for $p = .05$, $r =$	.48	.44	.34	.32	.28	.37	.40	.13	
Change in <u>D</u>	-.10	.23	-.02	.02	.02	-.10	.06	.04	
Change in <u>NL</u>	-.02	.44	-.14	.24	.05	-.01	-.11	.06	
Change in <u>SL</u>	.38	.09	.12	-.17	.05	.45	.27	.12	50
Change in <u>CC</u>	.20	.14	.16	.08	.09	.13	.28	.16	50
Change in <u>FL</u>	-.45	.06	.03	-.07	-.04	-.14	-.01	-.13	
Change in <u>A</u>	-.38	-.12	-.06	-.13	.01	.25	.21	-.07	
Change in <u>I</u>	-.24	-.12	.28	.19	-.13	.24	-.16	-.02	
Change in <u>F</u>	-.25	-.08	-.05	-.03	-.05	-.03	.13	-.03	
Change in <u>L</u>	-.10	.26	.25	.14	-.24	-.18	-.09	-.02	
Change in <u>E</u>	.30	.15	-.29	-.16	.21	.05	-.04	.07	
Change in <u>R</u>	.13	-.32	.00	.06	.27	-.03	-.34	-.02	
Change in <u>P</u>	.56	.22	.00	-.08	.06	-.14	-.12	.02	

Table 10: CORRELATIONS BETWEEN INITIAL TSI SCORES AND CHANGES IN TSI SCORES DURING
THREE YEARS OF THEOLOGICAL SCHOOL

(N = 204; for p = .05, r = .14)

		- Initial TSI scores on entering theological school -												Pages of Manual
		<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>	
Changes in TSI scores during theological school -	<u>D</u>	-.51	-.04	-.12	-.21	.10	.12	.15	-.24	.11	-.17	-.11	.18	54
	<u>NL</u>	-.18	-.52	-.02	-.11	.04	.07	.11	.11	-.06	-.09	-.07	-.02	
	<u>SL</u>	-.02	-.01	-.47	-.18	.06	.02	.12	-.07	.11	-.19	.06	.04	
	<u>CC</u>	-.02	-.02	-.14	-.50	.11	.03	.14	-.12	.13	-.24	.04	.05	
	<u>FL</u>	.07	.02	.15	.17	-.66	-.03	-.14	.07	.06	.18	-.17	-.08	
	<u>A</u>	-.01	-.01	.05	.12	.02	-.34	.05	.12	-.11	.11	-.02	.08	
	<u>I</u>	.16	.08	.08	.12	.00	.01	-.50	.16	-.06	.27	.20	-.04	
	<u>F</u>	.02	-.02	.04	.00	-.07	.06	.06	-.40	.01	.00	.03	.20	
	<u>L</u>	-.08	-.11	.09	.11	.02	-.04	-.02	.04	-.35	.14	.11	.11	
	<u>E</u>	-.05	.00	-.13	-.14	.12	.06	.16	-.12	.27	-.43	-.03	.18	30
	<u>R</u>	-.02	-.04	.06	.02	-.08	.19	.03	.07	.20	-.02	-.57	-.04	66
<u>P</u>	-.08	.04	.02	-.02	-.03	-.03	.16	.07	-.13	.05	.10	-.28	68	
Pages of Manual							56 66	58 68	60	62 66	63 64	66 68	68	

Table 11: CORRELATION BETWEEN CHANGES IN TSI SCORES AND MISCELLANEOUS VARIABLES

(N = 204; for $p = .05$, $r = .14$)

		Pages of manual on which results are discussed
Between changes in <u>D</u> and:		
Drop-out from seminary without degree	-.23	20
Feels comfortable, on leaving seminary, about demand for dynamic and persuasive leadership	.18	20
Between changes in <u>A</u> and:		
Size of home town	-.16	55
Still a student longer than three years	-.16	55
Placement in local parish after graduation	.12	58
Between changes in <u>I</u> and:		
Increased interest in parish ministry	.16	
Increased interest in teaching ministry	-.14	
Teaching listed as alternative vocation	-.19	
Feels comfortable, on leaving seminary, about demand for scholarly interest and academic proficiency	.15	
Between changes in <u>P</u> and:		
Courses in social human relations among disliked	-.14	
Definite in commitment	.24	
Others from home church entering ministry	.23	
Previous vocational experience	.10	
Father in outdoor occupation	.18	
Outdoor occupation as alternative	.20	

Table 12: CORRELATION OF SELECTED VARIABLES WITH INITIAL TSI SCORES AND WITH CHANGES
IN SL (SPECIAL LEADING) SCORE DURING SEMINARY *

	<u>SL score on</u> <u>entering seminary</u>	<u>Change in SL</u> <u>during seminary</u>
Age on entering seminary	.37	-.13
Married on entering seminary	.24	-.21
Number of children	.35	-.17
Previous parish experience	.22	-.17
Change of denomination	.17	-.17
Father in outdoor occupation	.16	-.09
Aesthetic courses among best liked	-.19	.15
Aesthetic courses among disliked	.17	-.14

* Results of this table are discussed on page 51 of the manual.

Table 13: CORRELATIONS OF SELECTED VARIABLES INDICATING MATURITY WITH INITIAL E (EVANGELISTIC WITNESS) SCORE WITH CHANGE (DURING SEMINARY) OF E SCORE *

	<u>E score on entering seminary</u>	<u>Change in E during seminary</u>
Age on entering seminary	.24	-.08
Married on entering seminary	.18	-.18
Number of children	.21	-.08
^a Previous vocational experience	.29	-.16
Previous professional parish experience	.28	-.23
Definiteness of decision	.36	-.19
Field work as a parish minister	.16	-.20
Faculty rating of growth (low rating implying initial maturity?)	-.04	.13
Farming as an alternative vocation	.19	-.16

^a Item # 11 of the TSI asks the student to indicate the type of previous vocational experience. This information was not coded in the present study, so it is not known whether the previous experience is largely in religious or non-religious work. Overall, previous vocational experience correlates only .25 with report of previous professional religious experience; this may be attenuated because the former variable is coded on a two-point scale, and the latter on a four-point scale. However, it may be inferred from the similar correlations with E, that high E's previous vocational experience is likely to have been in a parish.

* Results of this table are discussed on pages 63 and following of the manual.

Table 14: CORRELATIONS OF SELECTED VARIABLES WITH INITIAL R (SOCIAL REFORM) SCORE AND WITH CHANGE (DURING SEMINARY) OF R SCORE*

	<u>R score on entering seminary</u>	<u>Change in R during seminary</u>
Influenced in decision for ministry by:		
Family	-.11	.07
Friends	-.09	.12
Ministers	-.01	-.18
Teachers	.06	-.09
Father a teacher	.16	-.12
Still a student after three years	.10	-.12
Feels comfortable about meeting scholarly demands (on entering seminary)	.08	-.09
Feels comfortable about meeting scholarly demands (on leaving seminary)	.18	-.12

* Results of this table are discussed on page 66 of the manual.

Table 15: CORRELATIONS OF SELECTED VARIABLES WITH INITIAL P (SERVICE TO PERSONS) SCORE
AND WITH CHANGES (DURING SEMINARY) OF P SCORE*

	<u>P score on entering seminary</u>	<u>Change in P during seminary</u>
Definite in commitment	.03	.24
Others from home church entering ministry	.00	.23
Previous vocational experience	-.02	.10
Father in outdoor occupation	-.06	.18
Outdoor occupation as alternative	-.06	.20
Interest in teaching ministry	-.13	.13

* Results of this table are discussed on page 68 of the manual.

tsi validity studies
a replication at concordia seminary (st. louis)

BY

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VOCATIONAL GUIDANCE OF THEOLOGICAL STUDENTS
A MANUAL FOR THE USE OF THE THEOLOGICAL SCHOOL INVENTORY

TSI VALIDITY STUDIES: A REPLICATION AT CONCORDIA SEMINARY (ST. LOUIS)

James E. Dittes

This study replicates at a single seminary research conducted earlier with a sample of seven schools and reported in two Theological School Inventory Research Bulletins, #3 and #4: "TSI Scores in Relation to Personal Background, Performance in Seminary, and Post-Seminary Vocational Choice" and "Changes in TSI Scores During Seminary." This report should be read in conjunction with these Research Bulletins and with the manual of the Theological School Inventory to which they and this are supplements: "Vocational Guidance of Theological Students." The major tables of this report correspond with the tables of those Research Bulletins.

Concordia Seminary in St. Louis was one of nine schools intended in the original sample to represent a cross-section, denominationally, theologically, and geographically, of Protestant theological schools. However, the pattern at Concordia of an almost universal intern year--stretching completion of seminary to four years after entrance--made it impossible to complete research there at the same time as the other schools, since our design required data after graduation.

The original design has now been completed with the Concordia sample, replicating exactly the procedures previously reported.¹ This affords a welcome chance to test the general patterns of earlier results and interpretations with a sample substantially different in important characteristics from that of the earlier studies.² (It should be mentioned that ratings and other criteria data were collected at Concordia while the previous Research Bulletins and manual were in press, so the data are completely independent.) Concordia students represent a different sample from that previously tested in several important respects. The school is perhaps somewhat isolated educationally, theologically, and ecclesiastically from the traditions represented by our other schools, among whom there is perhaps more interchange. In some respects, the school may represent a more traditional theological stance. Compared with other seminaries, it tends to recruit a more homogeneous student body, most of them coming from a single pattern of parochial, church-related education.

The data are based on the group of 143 students who completed the TSI when they entered Concordia in the fall of 1959. This comprises the "larger sample." The "smaller sample," providing most of the data reported here, comprised the 108 of these students for whom complete follow-up data were obtained in 1963, including a retesting with the TSI, faculty and field work ratings, seminary records, and data on their first placement after graduation.

The data and analyses are identical with those described on pages two through five of Research Bulletin #3, and one through four of Research Bulletin #4. These will not be detailed again here.

Overview of Results

In general, the findings with Concordia tend to support the interpretations of the TSI scales suggested by the previous research. This is especially true of the following scales: D, NL, FL, I, R, and P. Particular characteristics of this seminary seem to be reflected in results found with the "conservative" cluster, SL, CC, and E, and with the scales A and L.

¹We are grateful to Dean Kenneth Breimeier and to his faculty colleagues, as well as to the Concordia graduating class of 1963, for their splendid cooperation. Dr. Breimeier has served most ably as our research associate at Concordia.

²This opportunity is all the more welcome since local practical difficulties made data unavailable from the other Lutheran seminary, and the ninth school in our originally intended sample.

Table 1: INTERCORRELATIONS OF TSI SCORES
(N = 143)

	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>D</u>	.25	.11	-.03	-.39	-.15	-.32	.02	.05	.32	.00	-.02
<u>NL</u>		.03	-.01	-.04	-.11	-.18	-.16	.17	.12	-.01	.16
<u>SL</u>			.52	.09	-.35	.08	.36	-.34	.29	-.02	-.07
<u>CC</u>				.08	-.24	.05	.45	-.35	.20	-.05	-.08
<u>FL</u>					-.18	.24	-.01	-.09	-.25	.17	.23
<u>A</u>						-.32	-.24	.26	-.22	-.30	-.19
<u>I</u>							.01	-.28	-.20	-.16	-.12
<u>F</u>								-.27	-.02	-.18	-.30
<u>L</u>									-.39	-.14	-.02
<u>E</u>										-.08	-.31
<u>R</u>											.17

It should be noted that in the correlations below the broken line, the ipsative (forced choice) nature of Section IV would produce intercorrelations of $-.18$, if scales were in fact unrelated. This figure, not $.00$, should be regarded as a base line in interpreting the magnitude of the relations.

Persistence into Parish Ministry

Table 2 (which may be compared with Research Bulletin #3, Tables I through 4) presents data concerning students' persistence through school and into the parish ministry. The pattern of relation with TSI scores is generally the same at Concordia as at other schools. D is well-validated by these data and the NL score at Concordia appears to be fairly well indicative of strength and maturity of motivation predictive of persistence into the parish. At this school, NL, A, and L may all reflect firm grounding in the preseminary training and guidance patterns of the Synod. The correlations with I, R, and P suggest that at Concordia, as previously suggested, high scorers may indicate a certain restlessness with traditional forms of ministry.

As will be seen consistently at Concordia, the "conservative" cluster of scales, SL, CC, and E, appears to have special meaning, where these scales have high means and low variances.

FL shows a particularly strong validity at Concordia where the mean is low but where the students who claim high flexibility on this scale at entrance apparently exercise it in the course of their vocational decisions and are less likely to continue in school or to enter the parish ministry.

Table 2: CORRELATION BETWEEN TSI SCORES AND INDICES OF PERSISTENCE INTO PARISH MINISTRY

	Dropout from School (See RB 3: Table 1)		Placement Index* (See RB 3: Table 2)		Post-Seminary Vocational Decision** (See RB 3: Table 3)		Choice of Field Work Other Than Parish Church*** (See RB 3: Table 4)	
	7 school sample	Concordia	7 school sample	Concordia	7 school sample	Concordia	7 school sample	Concordia
N = for p=.05, r =	497	143	497	143	497	143	204	108
	.09	.16	.09	.16	.09	.16	.13	.19

<u>D</u>	-.11	-.15	.15	.30	.12 -.04 -.05 -.05	.05 -.08 -.11 -.09	-.19	.02
<u>NL</u>	-.09	-.10	.08	.17	.01 .06 -.03 -.09	.01 -.09 .00 -.07	-.08	-.11
<u>SL</u>	-.03	-.02	.12	.00	.10 -.04 -.12 -.12	-.03 .00 .01 .04	-.28	-.03
<u>CC</u>	-.03	.02	.10	.01	.07 .02 .01 -.15	-.14 -.08 .08 .03	-.25	.09
<u>FL</u>	.01	.23	-.06	-.24	-.10 .05 -.04 .09	-.25 -.11 .19 .08	.24	.04
<u>A</u>	-.07	-.11	.08	.08	.08 .02 .01 -.01	.12 .03 .06 -.12	.08	.04
<u>I</u>	.07	.04	-.12	-.07	-.07 .00 .02 .12	-.20 .04 -.06 .20	.24	-.07
<u>F</u>	-.02	.08	.08	.04	.06 -.04 -.06 -.10	-.09 .06 -.07 -.04	.15	.03
<u>L</u>	-.02	.05	-.03	.04	-.01 .08 .07 .10	.07 .00 -.07 -.07	.26	.03

(Table 2 continued on next page)

Table 2: CORRELATION BETWEEN TSI SCORES AND INDICES OF
PERSISTENCE INTO PARISH MINISTRY
(Continued)

	Dropout from School		Placement Index*		Vocational Decision**		Field Work***	
	7 school sample	Concordia	7 school sample	Concordia	7 school sample	Concordia	7 school sample	Concordia
N =	497	143	497	143	497	143	204	108
for p=.05, r =	.09	.16	.09	.16	.09	.16	.13	.19
<hr/>								
<u>E</u>	-.04	-.08	.10	.08	.06	.10	-.27	.00
					-.02	-.05		
					.00	.08		
<u>R</u>	.06	.11	-.06	-.12	-.13	-.08	.12	-.02
					.01	.0		
					-.02	-.09		
<u>P</u>	.03	.00	-.05	-.06	.02	.04	-.15	.01
					.06	-.03		
					-.09	-.02		
					.01	-.08		
					-.02	-.04		
					.02	.13		

* Placement index is devised by assuming that post-seminary placement ranges along a single scale with drop-outs scored as 1, non-religious work scored as 2, non-pastoral religious work scored as 3, non-parish pastoral work scored as 4, and parish ministry scored as 5.

** First line represents correlation with whether student entered any form of ministry in a local parish.

Second line represents correlation with whether student entered any form of pastoral ministry, such as a chaplaincy, not in a local parish.

Third line represents correlation with whether student entered a non-pastoral form of religious work, such as teaching of religion.

Fourth line represents correlation with whether student entered work not specifically connected with religion or a religious institution.

*** No correlation was possible, as was done with other schools, with amount of field work as a minister or as a parish church assistant, since there was no variability; all students reported field work in these categories.

Seminary Performance

Table 3 suggests that NL background prepares a student to fit in well at Concordia as perhaps also does E motivation. (In general, it will appear that the Lutheran background relates E somewhat more closely with NL than with SL, which is correlated with E at other "conservative" schools.)

In general, the data seem to coincide with the "image" that might be held generally of this school. The faculty here do not disapprove of D nor favor FL and I, as they generally do at other schools. The latter fact is undoubtedly related with the restlessness with the parish ministry that FL and I show in Table 2. Note, in Table 15, that participation in non-parish field work appears to raise I and FL, and that personal counseling in the seminary appears to increase D. Notice, in Table 16, the tendency for favorable faculty opinion to be associated with increase of FL and decrease of E during seminary; these changes are perhaps most likely a kind of statistical regression and the correlation represents the faculty approval of those initially low in FL and high in E.

The final column of Table 3 might also best be interpreted as an index of the degree to which students feel comfortable with the faculty of the seminary. High I students do not seek counseling as they do elsewhere, and high SL--CC--E students apparently do not resist it, as elsewhere, perhaps

because they feel more comfortable with the faculty. On the other hand, the low relationships here, as with the faculty ratings, may simply reflect the difficulty of getting reliable data of this kind in a large school.

Table 3: CORRELATION BETWEEN TSI SCORES AND EVIDENCE OF SEMINARY PERFORMANCE

	Field Work Ratings (See RB 3: Table 5)		Faculty Ratings* (See RB 3: Table 6)		Seminary Grade Average (See RB 3: Table 7)		Personal Counseling During Seminary (See RB 3: Table 10)	
	7 school sample	Concordia	7 school sample	Concordia	7 school sample	Concordia	7 school sample	Concordia
N =	204	108	204	108	204	108	204	108
for p=.05, r =	.13	.19	.13	.19	.13	.19	.13	.19
<u>D</u>	-.06	-.04	-.17 -.08 -.10	-.02 -.04 -.02	-.06	.08	-.18	-.03
<u>NL</u>	.10	.15	.09 .06 .06	.15 .05 .14	.08	.21	-.07	-.15
<u>SL</u>	-.03	.02	-.02 .05 .03	.07 .14 .07	-.19	.14	-.19	.11
<u>CC</u>	-.05	.05	-.06 .01 -.01	.04 .01 .02	-.17	.11	-.25	-.06
<u>FL</u>	.02	-.01	.15 .09 .13	-.01 -.03 -.02	.25	-.07	.10	.06
<u>A</u>	.10	.03	.01 -.01 .07	-.02 .00 -.01	.03	.07	.00	-.02
<u>I</u>	-.01	-.08	.17 .03 .01	-.05 .00 .01	.22	-.06	.25	.06
<u>F</u>	-.09	-.10	-.19 -.01 -.05	-.08 -.09 -.07	-.15	.01	-.06	.01
<u>L</u>	.06	.12	.01 -.03 -.02	.05 .04 .08	.08	-.09	.14	-.10
<u>E</u>	-.06	.12	-.08 -.04 -.02	.11 .07 .08	-.12	.20	-.23	-.01
<u>R</u>	.00	-.02	.07 -.03 -.01	.00 -.01 .00	.08	-.10	-.04	-.04
<u>P</u>	.02	-.06	.05 .07 .06	-.01 -.01 -.08	-.04	-.08	.07	.06

- * In each cell, the first line presents correlation with rating of involvement.
 the second line presents correlation with rating of growth during seminary.
 the third line presents correlation with rating of potential effectiveness in the ministry.

Tables 4 through 12 present data for Concordia corresponding exactly to Tables 11 through 19³ of Research Bulletin 3. These are best interpreted with reference to each scale, as is done below.

Tables 13 and 14 report data corresponding to Tables 1 and 2 of Research Bulletin 4, and Tables 17 and 18 correspond to Tables 10 and 11 of Research Bulletin 4. Table 15 reports correlations between changes in TSI scores and certain records of seminary experience, and Table 16 reports correlations between changes in TSI scores and evidence of seminary performance; interpretations of the significant correlations in these two tables have already been offered above.

D (Definiteness)

The directly validating data show at least as strong a relationship with the D scale at Concordia as in the previous seven-school sample. The high D scorer reports directly that his decision is definite (Table 4), and that he is interested in religion and that he is interested in the parish ministry (Table 5). Increase in D during seminary is correlated with increase in interest in the parish ministry (Table 19). He does not drop out of school and he enters the parish ministry (Table 2). He shows some confidence in his decision in, for example, rating his own emotional health high (Table 11) and, as in the previous sample, expressing confidence about his ability to make personal sacrifices and to make his personal example part of the ministry (Table 7). As in the previous sample, he is not confident about his ability to handle administrative duties (Table 7). The definiteness implied by this scale is correlated strongly negatively with the flexibility of the FL scale (Table 1).

The high D scorer at Concordia, however, does not appear to have quite the same background and source of his definiteness as has been inferred in the other samples. For example, there is only the slightest of tendencies for D score to be associated with more mature men (Tables 4 and 6). Nor does the Concordia high D have several close friends in the ministry nor rate highly his church's religious training (Table 6). High D scorers are not inclined to report at Concordia, as they are elsewhere, that their vocational decision has been influenced by their ministers. Apparently, there are other sources and contexts of his definiteness which are not tapped by the items we have available here. There are some suggestions in that the high D scorer is somewhat likely to come from a farm (Table 9), that he has liked religion courses (Table 8), and that D is increased during seminary by personal counseling (Table 15). There is a slight tendency for decrease in D during seminary to be associated with favorable faculty ratings and grades (Table 16); perhaps this decrease is a statistical regression of initial high scorers, whom the faculty approves.

NL (Natural Leading)

The motivation tapped by the NL scale appears to be particularly congenial with the context of Concordia Seminary. These items assess confidence and familiarity with the role of the ministry in a way that is especially appropriate, apparently, to the background of Concordia students. The NL score seems somewhat better related, than in the previous seven-school sample, with other indices of fitting congenially into the ministry. It is slightly better correlated than in the earlier sample with the relevant, direct statements in Section III of the TSI (Table 7). The NL score is related, as elsewhere, with being definite about commitment (Tables 1 and 4), with having made an early decision (Table 4), and with having gained previous professional parish experience (Table 6). NL is more closely related at Concordia than elsewhere with interest in the parish and with disinterest in teaching (Table 5). The tendency to be predictive of remaining in school and entering the parish ministry for field work or after graduation is stronger at Concordia than in the early sample (Table 2). High NL scorers are rated and graded particularly well at Concordia (Table 3).

³Data corresponding to Tables 8 and 9 of Research Bulletin 3 and Tables 3 and 4 of Research Bulletin 4 cannot be presented because there is so little variability. All students have common patterns of internship and clinical training.

Some of the miscellaneous data suggest that the high NL scorer may come from a somewhat different background to Concordia than was suggested with the earlier larger sample. At Concordia, apparently, the NL scorer may come from a more rural or lower class family. He reports coming from a smaller church, which necessarily has sent fewer others into the ministry (Table 11). His family is not urban (Table 4) as was found elsewhere, and his father is not likely to be a teacher (Table 9). But these are miscellaneous data having to do with the background of the NL motivation. The basic nature and implications of this motivation appear to be fairly well defined at Concordia in the same terms as elsewhere.

SL (Special Leading) and CC (Concept of the Call)

The special leading understanding of the call apparently has a more independent meaning at Concordia than at some of the other schools in our earlier sample. As Table 12 makes clear, SL and CC are not simply accounted for as part of a general conservative factor. Table 12 has no particular meaning in this report except to contrast with Table 19 of Research Bulletin 3, in which evidence was found for a clear conservative-liberal factor which accounted for most of the results with the SL and CC scales. Although SL and CC are correlated with each other and with E, and negatively correlated with L, they are not correlated with D, E, FL or with rating of home church as conservative.

On the other hand, as might be expected from Lutheran theology, to feel a special leading by God to the ministry is to be associated with considerable confidence in one's exercise of that ministry along lines that are frequently associated with a more "liberal" understanding of the call. This includes confidence about many of the demands recorded in Section III (Table 7). In fact, virtually all of the correlations of Section III items with SL and CC, and also with E, are positive, a phenomenon reserved in the earlier sample for relation with the NL scale. Only with the demand of being a personal example is there trend for a negative relation (*simul justus simul peccator*). Particularly remarkable, perhaps, is the positive correlation with scholarly interests (Table 7) and with good academic performance (Table 3), in sharp contrast to the record of other seminaries.

The SL score at Concordia does not tend to be restricted to the older man changing occupations (Tables 4 and 6), as at some other schools. However, the high SL-CC scorer at Concordia, as elsewhere, does tend to come from a smaller town and to have parents who are not college graduates (Table 4).

It may seem somewhat surprising that the high SL-CC scorer at Concordia does not report definiteness about his decision (Table 4), as elsewhere, nor report interest in the parish ministry (Table 5).

FL (Flexibility)

There is a strikingly strong tendency for the self-reported flexible person, on the FL scale, to drop out of school and not to enter the parish ministry (Table 2). He was initially indefinite about his decision (Tables 1 and 4). Non-parish field work tends to increase FL (Table 15), in contrast with the other sample. On the Section III items listing demands of the ministry, FL shows a pattern very much like the previous sample, which may perhaps be most simply interpreted as reflecting non-parish interests (Table 7).

This tendency to drop out of school, and the associated patterns, may be interpreted in one or both of two ways: (1) Perhaps the flexible person is simply demonstrating his flexibility, and validating the scale, by making a shift in his vocational plans when others do not. Or (2) perhaps the personality characteristics associated with flexibility find a particular uncongeniality in the seminary. The data available do not readily permit a decision among these interpretations. One slight bit of data contradicting the second possibility is in Table 16, where the student increasing FL tends to be rated and graded well by the faculty; this is not simply an artifactual regression, since there is virtually zero correlation between initial FL and faculty ratings and grades. Furthermore, as elsewhere, the high FL tends to report that he has been influenced by teachers (Table 6).

The Concordia data (Table 8) confirm the peculiarly strong, but apparently reliable, relation between the FL score and liking of physical education, which was discussed on page 24 of the manual.

The other available data, in addition to some of those cited above, tend to confirm an interpretation of FL as loosely identified with traditional parish religious interests. He tends to come from an urban background (Table 4), and medicine is an attractive alternative vocation (Table 10). Increased FL tends to be associated with increased I and decreased E (Table 13). However, FL does not show the negative correlation with SL and CC found in other schools (Tables 1 and 12).

A (Acceptance)

In general, the A scale seems about as well-validated by the Concordia data as by the earlier data, with one important difference. The influences to which the high A scorer is responsive and which form part of his motivation seem to be those more of the "system" or the church as a whole, rather than of particular persons. Furthermore, the seminary itself is an important final part of the system of influences which affect the high A scorer.

High A does not report, as high A's elsewhere tend to, significant influence from parents or friends in his vocational decision (Table 6). However, like high A's elsewhere, his father (although not his mother) has been highly active in the church and may well have been a minister (Table 6), and both parents are likely to have been college graduates (Table 4) (suggesting a model of influence toward higher education as well as towards ministry). He was young when he first decided for the ministry (Table 6) and is still likely to be young at his entrance to seminary (Table 4), although somewhat more likely than A's elsewhere to be married and to have children. He is unlikely to have previous professional experience either in the parish or in another vocation (Table 6), again suggesting youth and the relatively restricted background.

When he enters seminary, the high A scorer is still not fully committed to the parish ministry, and needs the seminary to complete this influence. Unlike A's elsewhere, he expresses explicit disinterest in the parish as he enters seminary and interest in teaching (Table 5). He is inclined to dislike religion courses (Table 8). Like A's elsewhere, he is likely to be indefinite about his commitment (Tables 1, 4, and 13). (However, it is significant that A also shows negative correlation, as elsewhere, with such signs of "restlessness" as I and R--Table 1--although this is remedied during seminary--Table 14.) However, unlike his fate at other seminaries, the high A scorer--responsive to outer influences--seems to fit well at Concordia. Increase in A is favored by the faculty (Table 16) in contrast to other schools. The high A scorer is likely to increase the definiteness of his commitment (Table 4) and actually to enter the parish (Table 2).

Like A's elsewhere, he expresses some lack of confidence in his ability at dynamic leadership, and indeed in most of the demands suggested in Section III. But, perhaps significantly in the light of our suggestion about the appeal of the "system," he is likely to feel confident about his administrative ability (Table 7). Even more strongly than A's elsewhere, he has liked courses in the structure of society (Table 8).

I (Intellectual Interest)

On the most direct evidence available, the I scale is validated by the Concordia data. The high I claims to feel confident in his scholarly interests and to anticipate difficulty about dealing with those with restricted intellects (Table 7). He is likely to continue as a student beyond the graduation of his class (Table 11) and, correspondingly, one who increases I during seminary is less likely to get married during seminary (Table 19). As elsewhere, he tends to like "intellectual" subjects, such as language, and to dislike "non-intellectual" subjects, as social-human relations (Table 8). When he enters seminary, he is more likely to be interested in teaching than in the parish (Table 5), though less strikingly so than elsewhere, and there is some chance he will go into non-religious work, and not the parish (Table 2).

However, the history and context of his intellectual interest is, at Concordia, not what might be generally expected and is generally found. His parents are not college graduates (Table 4), he has not been influenced in his decision by teachers (Table 6), and his family is not so likely to be

urban (Tables 4 and 10). He is not so likely to be younger and unmarried (Table 4), which elsewhere suggests a more restricted "book-bound" history. He is not likely, as elsewhere, to seek counseling from his faculty, which is taken elsewhere to imply a close, congenial relation with the faculty; and unlike other schools, he is not rated or graded well by the faculty (Table 3) (emphasizing once again that the I scale or seminary grades, or both, reflect interests and not necessarily ability).

In summary, the Concordia high I seems to have the intellectual interests which the scale implies, but they appear to be his own. They do not appear to be generated or supported by the usual factors.

There remains evidence at Concordia, as elsewhere, that strong I implies a somewhat loose relationship and commitment to the parish church. High I is likely to be indefinite about his decision (Tables 1 and 4). His father is not likely to be active in a church, nor to be a minister, and his mother is likely to be rated even as inactive (Table 6). As elsewhere, he is unlikely to have friends in the ministry (Table 6), nor to feel comfortable about most of the demands of the ministry (Table 7). Experience in a non-parish form of field work is likely to increase I (Table 15). I is correlated negatively with other scales implying close past identification with the church, A, E, and L (Table 1). And if I decreases during seminary, it is likely to shift to R or P (Table 17), the other two scales which are interpreted as possibly indicating some restlessness with the parish.

F (Self-fulfillment)

F at Concordia, as elsewhere, tends to be characteristic of an older, more conservative student--with the important difference that high F is not likely to be changing from a secular occupation (Table 6). F at Concordia is correlated with the "conservative" scales of CC and SL (Table 1), although not with E, which seems to have a special meaning at Concordia. As elsewhere, high F is more likely to be older when he considered the ministry (Table 6), and older when he entered seminary (Table 4). Although he is not particularly likely to be married on entering seminary (Table 4), he is more likely to be married before he finishes (Table 11), and to have children (Table 4). As elsewhere, he seems to show strong confidence about being able to make personal sacrifices (Table 7).

There is also a tendency at Concordia, as elsewhere, for F to be dissociated from intellectual interests. His parents are unlikely to be college graduates (Table 4), and he has not been influenced in his decision by teachers (Table 6). He tends to receive low ratings and grades from his faculty (Table 3), and the student who increases F during seminary is especially disapproved by the faculty (Table 16).

Perhaps associated with the above, there is a tendency apparently unique at Concordia for F to be somewhat disinclined for the parish. He is less committed when he enters (Tables 1, 4, and 5) and tends, during seminary, to lose interest in the parish and to gain interest in teaching (Table 11). Perhaps the Lutheran ministry is a less individualistic activity than in some other denominations, so that the one entering it for the individualistic motives implied by F may feel less comfortable in it.

L (Leadership Success)

A high L scorer at Concordia may perhaps be regarded more favorably than elsewhere. The past successful experience to which a Lutheran student refers when he accepts the L items may be more realistically related to his continuing experiences in seminary and in the ministry. There appears to be no evidence here of the overconfident "boy wonder," as one interpretation of the scale was characterized in the manual. The L scorer shows more tendency to be rated well by the faculty (Table 3), and to go into the parish (Table 2), and he is inclined in seminary to increase his interest in the parish (Table 11). He does not seek counseling as his fellows at other schools tend to (Table 3). He is not younger nor childless (Table 4). He claims less confidence concerning the demands of the ministry on Section III items (Table 7), with the curious exception of being a personal example. Among the evidences of a more realistic basis for his decision is the fact that he is more likely to have friends in the ministry (Table 6). His parents are not likely to be college graduates (Table 4) and may be rural (Tables 4 and 9), suggesting that he is less inclined to be pushed along by A-type influences.

However, among the data more directly validating the scale is the correlation with \bar{A} (Table 1), both scales reflecting common past experience. As elsewhere, the high \bar{L} is definite about his commitment (Table 4). His past successful experience causes him to like skills courses (Table 8).

\bar{L} remains at Concordia as elsewhere a more "liberal" motivation, showing negative correlation with \bar{CC} , \bar{SL} , and even \bar{E} (Table 1), and showing correlation with a rating of liberalness of home church (Tables 11 and 12).

E (Evangelistic Witness)

The high \bar{E} scorer at Concordia is firm in his determination to "bring the world to Christ," but he is perhaps inclined to interpret this less narrowly than some other places.

He is definitely committed to the parish ministry (Tables 1, 4, and 5) and tends to persist into it (Table 2) and not remain as a student (Table 11). Indicating this close identification with the church, he rates his own church religious training well (Table 6). He tends to be rated and graded well by the faculty (Table 3).

But the few data available confirm the expectation that a Lutheran student may be more inclined than some other "conservative" students to think more freely in "naturalistic" and less exclusively "spiritual" categories. The high \bar{E} student at Concordia breaks the otherwise universal pattern in not thinking of his own call strongly in "spiritual" terms; \bar{SL} and \bar{CC} are not highly correlated with \bar{E} (Table 1). The initially high \bar{E} student is inclined to lose \bar{D} and to gain \bar{FL} and \bar{R} and \bar{P} , the more "naturalistic" definitions of ministry (Table 17). The high \bar{E} 's father is likely to be a college graduate (Table 4), and he does not resist personal counseling as at other schools (Table 3). He expresses confidence about meeting a wide range of the demands listed in Section III of the TSI (Table 7).

R (Social Reform)

At Concordia, the \bar{R} score tends to be associated with the same restlessness about the parish ministry which has been suggested elsewhere. There is the same tendency for students to drop out of school and not go into the parish ministry (Table 2), although this does not show up when they express their initial interests (Table 5).

The available data are consistent with an understanding of the high \bar{R} scorer having his interest in religion and the ministry aroused in the context of grappling with social issues during college. His decision has been later (Table 6). He has been uninfluenced by family (Tables 1 and 6), and his father has been inactive in the church (Table 6). He judges the quality of his home religious training poor (Table 11). He reports that he likes religion courses in college (Table 8).

At Concordia, the \bar{R} score is not correlated with the one available item which might be looked to, to provide clearest validation of the face description of the scale, the expression of confidence in dealing with social and racial issues (Table 7). Although there is, of course, considerable difference between interest (indicated by the \bar{R} scale) and confidence, the two ought to be correlated, and they were significantly so, though slightly, with the previous total sample. But not so at Concordia. However, change in the \bar{R} score during seminary is correlated significantly with change in response to this item in Section III (Table 18).

P (Service to Persons)

There is a tendency at Concordia, although less significant than in the previous total sample, for the \bar{P} score to be correlated with those items which would be looked to as most directly validating the face description of the scale. This includes such Section III items as dealing with personality differences and with physical-mental illness. Consistent with earlier findings, the high \bar{P} scorer feels less confidence about dealing with administration and with making personal sacrifices (Table 7). The high \bar{P} scorer has liked courses in social-human relations and skills courses (Table 8), consistent with his pastoral interest,

and would go into social service as an alternative vocation (Table 10).

There is less evidence at Concordia than elsewhere that the P score can be regarded as an indication of restlessness with the parish ministry, at least as students come into seminary. There is a tendency for them to be definite about the decision (Table 4), and to have an interest in parish ministry or religious education and not in teaching (Table 5); there is also a tendency for them to have previous professional church experience (Table 6).

The P score at this school is related with report of strong influence by teachers (Table 6), who, perhaps in Lutheran schools, serve as models of pastoral interest.

Table 4: CORRELATION BETWEEN TSI SCALES AND SELECTED PERSONAL DATA

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Age</u>	.13	-.01	-.01	-.11	-.07	-.14	.02	.14	.04	.04	.04	-.07
<u>Married</u>	-.02	.02	.04	.03	-.02	.13	.06	-.13	-.13	.01	-.13	.08
<u>Number of Children</u>	-.14	-.11	.15	.16	.10	.02	-.03	.12	.00	.07	.02	-.14
<u>Definiteness of Decision</u>	.48	.19	.03	-.11	-.19	-.20	-.18	-.07	.16	.11	-.02	.16
<u>Change in Definiteness</u>	-.36	-.14	.00	.04	.10	.29	.09	-.02	-.11	-.11	-.03	-.08
<u>Father a College Graduate</u>	-.13	-.08	-.18	.02	-.02	.16	-.06	-.19	-.16	.18	-.05	.01
<u>Mother a College Graduate</u>	-.06	-.06	-.19	-.06	-.01	.23	-.09	-.21	.05	-.02	-.10	.10
<u>Size of Home Town</u>	-.05	-.08	-.13	-.02	.17	.09	-.14	-.01	.00	-.02	-.06	.11

Table 5: CORRELATION BETWEEN TSI SCALES AND INTEREST IN TYPE OF MINISTRY (ITEM 51)

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Parish Ministry</u>	.40	.25	-.03	.01	-.12	-.21	-.23	.04	-.16	.29	.09	.11
<u>Missions</u>	-.13	-.08	.02	-.02	.07	.05	-.07	-.01	.12	-.01	-.04	-.03
<u>Ministry of Religious Education</u>	.04	-.03	-.01	-.04	-.04	.05	.04	-.09	.12	-.18	-.04	.16
<u>Chaplaincy</u>	-.14	.05	-.11	-.06	.15	.12	.00	-.08	.08	-.05	-.09	-.03
<u>Teaching Ministry</u>	-.15	-.23	-.01	.02	.03	.18	.16	-.06	-.02	-.15	-.07	.03

Table 6: CORRELATION BETWEEN TSI SCALES AND INFLUENCES ON CHOICE FOR MINISTRY

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Influenced by (Item 52):</u>												
<u>Family</u>	-.06	.12	-.04	-.12	.00	.13	-.03	.10	-.06	.09	-.23	-.12
<u>Friends</u>	.07	.07	.00	.05	.03	.01	-.18	.03	.05	-.05	.15	.07
<u>Ministers</u>	.07	.05	-.01	-.02	-.04	-.04	-.03	.07	-.02	-.04	.06	.05
<u>Teachers</u>	.04	-.01	-.05	-.06	.16	-.08	.02	-.19	-.04	.02	.00	.24
<u>Age of first decision</u>	.20	-.06	.01	.04	-.04	-.20	.03	.15	-.11	.01	.30	-.04
<u>Age of final decision</u>	.06	-.27	.04	.01	-.10	-.07	.10	-.03	-.16	-.03	.21	.12
<u>Father's activity in home church</u>	-.20	-.06	-.13	.05	.01	.35	.06	.02	-.04	-.05	-.38	-.14
<u>Mother's activity in home church</u>	.09	.01	.10	.06	.00	-.05	-.19	.02	.07	.08	.06	.11
<u>Rated adequacy of church religious training</u>	.02	.08	.02	-.05	-.10	.10	-.07	-.19	-.03	.23	-.15	-.05
<u>Number of friends in ministry</u>	.03	.09	-.08	.03	-.04	.04	-.15	-.07	.17	-.08	.10	.00
<u>Previous vocational experience</u>	.05	-.16	-.10	.02	.04	.06	-.03	-.14	-.07	.07	-.06	.16
<u>Previous professional parish experience</u>	.06	.27	.16	.17	.02	-.25	-.11	.04	-.07	.12	.03	.18
<u>Father in church vocation</u>	-.26	.00	-.16	.00	-.04	.18	-.06	-.15	-.10	.14	-.07	-.06

Table 7: CORRELATION BETWEEN TSI SCALES AND RATED EFFECTIVENESS IN MINISTERIAL DEMANDS

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Dynamic leadership</u>	.01	.43	.21	.14	.12	-.24	-.04	.12	-.04	.30	-.05	-.10
<u>Administration</u>	-.02	.17	-.02	.09	-.16	.21	-.08	.03	.18	.00	-.08	-.21
<u>Public speaker</u>	-.07	.51	.12	.07	.13	-.05	.00	-.14	.00	.02	.09	.13
<u>Social and racial</u>	-.05	.09	.01	.05	.18	-.06	.02	.00	.01	.13	.04	-.09
<u>Restricted intellect</u>	.15	.04	.12	.08	-.04	.08	-.25	.11	-.08	.19	-.07	-.02
<u>Personality differences</u>	.04	.35	.21	.12	.10	-.12	-.16	-.03	.04	.22	-.08	.15
<u>Personal sacrifice</u>	.20	-.10	.14	.09	-.07	-.17	.01	.18	-.24	.23	.11	-.14
<u>Physical-mental illness</u>	.04	.06	.23	.14	.12	-.16	-.09	.09	-.21	.20	.12	.09
<u>Personal habits</u>	.18	.18	-.05	-.12	-.20	-.13	-.07	-.11	.21	.06	.01	.07
<u>Scholarly interests</u>	-.22	.13	.17	.22	.13	-.11	.32	.12	-.23	-.10	.00	-.02

Table 8: SIGNIFICANT CORRELATION BETWEEN TSI SCALES AND PREFERENCES FOR COLLEGE COURSES

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Dislike language</u>							-.23				-.19	
<u>Dislike skills</u>		-.20							-.23			
<u>Like structure of society</u>	-.30		-.26			.27		-.21				
<u>Like physical education</u>					.29							
<u>Like religion</u>	.22					-.19					.20	
<u>Like social-human relations</u>							-.20					.20
<u>Like skills</u>												.30
<u>Like art</u>	-.20						.20					.20
<u>Like language</u>								.22	-.21	.19		-.27

Table 9: SIGNIFICANT CORRELATION BETWEEN TSI SCALES AND FATHER'S VOCATION

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Church</u>	-.26											
<u>Teacher</u>		-.20										
<u>Outdoor</u>	.21					-.19			.21			
<u>Public service</u>				-.20								
<u>Organization</u>								.21				

Table 10: SIGNIFICANT CORRELATION BETWEEN TSI SCALES AND ALTERNATIVE VOCATIONAL CHOICE

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>Entertainment</u>				-.19								
<u>Military</u>							-.22					
<u>Social service</u>												.19
<u>Business contact</u>							.24	.21	-.19			
<u>Technology</u>									.21			
<u>Medicine</u>					.33							
<u>International</u>									.23			

Table 11: SIGNIFICANT CORRELATION BETWEEN TSI SCALES AND MISCELLANEOUS ITEMS

Between D (Definiteness) and

NL (Natural Leading)	.23
I (Intellectual Interest)	-.33
Self-rating of emotional adjustment	.34
Rated adequacy of home religious training	-.21
Placement in a local parish	.29
Vocational decision for non-religious work	-.24

Between NL (Natural Leading) and

Change in denomination	.24
Self-rating of emotional adjustment	.42
Church size	-.23
Others from home church in ministry	-.24

Between CC (Concept of the Call) and

A (Acceptance)	-.26
Increased interest in local parish	-.19

Between SL (Special Leading) and

A (Acceptance)	-.39
Increased interest in local parish	-.20

Between FL (Flexibility) and

I (Intellectual Interest)	.27
Self-rating of emotional adjustment	-.21
Rated adequacy of home religious training	-.19
Placement in a local parish	-.25
Increased interest in ministry of religious education	.21

Between A (Acceptance) and

I (Intellectual Interest)	-.30
F (Self-fulfillment)	-.20
L (Leadership)	.29
E (Evangelistic Witness)	-.27
R (Social Reform)	-.34
P (Service to Persons)	-.21
Rated adequacy of home religious training	.31
Increased interest in local parish	.24
Increased interest in teaching	-.36

Between I (Intellectual Interest) and

L (Leadership)	-.33
E (Evangelistic Witness)	-.22
Father living	-.26
Still a student after four years	.24
Vocational decision for local parish	-.23
Dropout	.24

Between F (Self-fulfillment) and

P (Service to Persons)	-.34
Change in marital status during seminary	.24
Increased interest in local parish	-.19
Increased interest in teaching	.22

Between L (Leadership) and

Rated conservativeness of home church	-.28
Increased interest in local parish	.30

Between E (Evangelistic Witness) and

Increased interest in local parish	-.22
Still a student after four years	-.19

Between R (Social Reform) and

Rated adequacy of home religious training	-.27
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Between P (Service to Persons) and

Rated conservativeness of home church	.19
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Table 12: VARIABLES ASSOCIATED WITH A "CONSERVATIVE - LIBERAL" FACTOR

	"Conservative" scales					Rated con- servativeness of home church	"Liberal" scales	
	<u>CC</u>	<u>SL</u>	<u>E</u>	<u>D</u>	<u>F</u>		<u>FL</u>	<u>L</u>
<u>CC</u> score		.53	.15	-.14	.44	.09	.16	-.34
<u>SL</u> score	.53		.18	-.03	.32	.02	.16	-.29
<u>E</u> score	.15	.18		.25	-.09	.00	-.21	-.38
<u>D</u> score	-.14	-.03	.25		.03	.04	-.42	.07
<u>F</u> score	.44	.32	-.09	.03		.05	-.01	-.20
Rated conservativeness of home church	.09	.02	.00	.04	.05		.08	-.28
<u>FL</u> score	.16	.16	-.21	-.42	-.01	.08		-.16
<u>L</u> score	-.34	-.29	-.38	.07	-.20	.28	-.16	
Age on entering seminary	-.11	-.01	.04	.13	.14	-.15	-.07	.04
Married on entering seminary	.03	.04	.01	-.02	-.13	-.07	-.02	-.13
Married during seminary	.06	.16	-.01	.05	.24	-.16	.01	.16
Number of children	.16	.15	.07	-.14	.12	.03	.10	.00
Self-rating of physical health	.09	.07	.02	-.03	.00	-.04	-.04	-.11
Age of first consideration of ministry	.04	.01	.01	.20	.15	-.08	-.04	-.11
Previous vocational experience	.02	-.10	.07	.05	-.14	-.04	.04	-.07
Previous professional parish experience	.17	.16	.12	.06	.04	-.12	.02	-.07
Previous change of denomination	.05	.13	.08	.07	.02	-.14	.12	.06
Father's activity in home church	.05	-.13	-.05	-.20	.02	.12	.01	-.04
Mother's activity in home church	.06	.10	.08	.09	.02	.00	.00	.07
Father in a church occupation	.00	-.16	.14	-.26	-.15	.07	-.04	-.10
Father in outdoor occupation	.00	.04	.02	.21	.03	-.06	-.03	.06
Grades in seminary	.11	.14	.20	.08	.01	.23	-.07	-.09
Influence of teachers on decision	-.06	-.05	.02	.04	-.19	.03	.16	-.04
Skills courses among best liked	-.03	-.05	-.10	.09	-.11	.07	.15	.00
Feels comfortable about:								
Demands for scholarly interests	.22	.17	-.10	-.22	.12	.15	.13	-.23
Working with those with restricted intellectual interests	.08	.12	.19	.15	.11	.08	-.04	-.08
Interest in parish on entering seminary	.01	-.03	.29	.40	.04	.07	-.12	-.16
Choice of field work jobs as minister								
Tendency to choose parish ministry after seminary	-.01	.08	.14	.24	.05	-.08	-.25	.10
Extended personal counseling during seminary	-.06	.11	-.01	-.03	.01	.14	.06	-.10
Feels comfortable about making many personal sacrifices	.09	.14	.23	.20	.18	-.04	-.07	-.24

(See footnote regarding Field Work on page 4)

Table 13: INTERCORRELATIONS OF CHANGES IN TSI SCORES
 N = 108; for $p = .05$, $r = .19$

	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>D</u>	.08	-.15	-.09	-.13	-.13	-.18	.06	-.03	.15	.02	-.02
<u>NL</u>		-.15	-.06	.05	-.11	-.02	.06	-.18	.08	.09	.14
<u>SL</u>			.33	-.04	-.06	.05	.08	.15	.00	-.07	-.15
<u>CC</u>				-.09	.01	.05	.10	.02	.11	-.19	-.13
<u>FL</u>					-.05	.27	-.06	.05	-.33	.11	.14
<u>A</u>						-.27	-.17	.10	-.09	-.22	-.26
<u>I</u>							-.03	-.08	-.17	-.19	-.18
<u>F</u>								-.10	-.10	-.13	-.17
<u>L</u>									-.23	-.21	-.24
<u>E</u>										-.34	-.11
<u>R</u>											.12

Table 14: MEAN CHANGES IN TSI SCORES DURING SEMINARY

	<u>7 school sample</u>	<u>Concordia</u>
<u>D</u>	.09	.81
<u>NL</u>	-2.29	1.34
<u>SL</u>	-1.94	-1.57
<u>CC</u>	-2.89	-2.27
<u>FL</u>	1.50	1.42
<u>A</u>	1.48	.90
<u>I</u>	-.35	1.14
<u>F</u>	-1.29	-1.94
<u>L</u>	1.12	.90
<u>E</u>	-1.75	-.84
<u>R</u>	-.15	-.25
<u>P</u>	1.09	.04

Table 15: CORRELATION BETWEEN CHANGES IN TSI SCORES AND
CERTAIN RECORDS OF SEMINARY PERFORMANCE

	<u>Extended Personal Counseling</u>	<u>Type of Field Work Experience*</u>
Change in <u>D</u>	.24	.00
Change in <u>NL</u>	.07	.00
Change in <u>SL</u>	-.17	.05
Change in <u>CC</u>	-.10	.00
Change in <u>FL</u>	-.06	.20
Change in <u>A</u>	-.05	-.02
Change in <u>I</u>	-.04	.19
Change in <u>F</u>	.04	.10
Change in <u>L</u>	-.04	-.09
Change in <u>E</u>	.11	-.08
Change in <u>R</u>	.04	-.08
Change in <u>P</u>	-.04	-.02

* Other than in a local parish.

Table 16: CORRELATION BETWEEN CHANGES IN TSI SCORES AND EVIDENCE OF SEMINARY PERFORMANCE

	Field Work Ratings		Faculty Ratings *		Grades	
	7 school sample	Concordia	7 school sample	Concordia	7 school sample	Concordia
N =	204	108	204	108	204	108
for $p=.05$, $r=$	.13	.19	.13	.19	.13	.19

Change in <u>D</u>	.15	-.07	.23 .22 .22	-.16 -.04 -.08	.04	-.11
Change in <u>NL</u>	-.02	.05	.00 .03 .08	-.01 .04 .03	.06	-.16
Change in <u>SL</u>	.01	.02	-.05 -.04 -.01	-.03 -.16 -.08	.12	-.03
Change in <u>CC</u>	.11	-.03	.09 .06 .10	-.10 -.02 -.06	.16	-.17
Change in <u>FL</u>	-.03	.20	-.02 -.04 .00	.26 .12 .15	-.13	.22
Change in <u>A</u>	-.14	.04	-.12 -.13 -.16	.16 .15 .09	-.07	-.02
Change in <u>I</u>	.03	.05	-.01 .00 .07	.02 -.05 -.07	-.02	.01
Change in <u>F</u>	.00	-.16	.02 .02 .04	-.20 -.10 -.19	-.03	-.11
Change in <u>L</u>	-.01	.08	-.06 -.02 -.03	.11 .15 .11	-.02	.08
Change in <u>E</u>	.10	-.19	.06 .13 .08	-.19 -.13 -.15	.07	-.18
Change in <u>R</u>	-.04	.04	.09 .08 .05	.02 -.03 .05	-.02	.09
Change in <u>P</u>	.08	.11	.07 .03 .11	.03 .05 .12	.02	.15

*In each cell, the first line presents correlation with rating of involvement during seminary; the second line presents correlation with rating of growth during seminary; the third line presents correlation with rating of potential effectiveness in the ministry.

Table 17: CORRELATION BETWEEN INITIAL TSI SCORES AND CHANGES IN TSI SCORES
DURING THREE YEARS OF THEOLOGICAL SCHOOL
N = 108; for $p = .05$, $r = .19$

- Initial TSI scores on entering theological school -

	<u>D</u>	<u>NL</u>	<u>SL</u>	<u>CC</u>	<u>FL</u>	<u>A</u>	<u>I</u>	<u>F</u>	<u>L</u>	<u>E</u>	<u>R</u>	<u>P</u>
<u>D</u>	-.49	-.10	.02	.08	.10	.12	.21	.04	.13	-.28	-.17	.04
<u>NL</u>	.01	-.49	.08	.08	.00	-.03	.11	.03	.07	-.14	-.07	.03
<u>SL</u>	.06	.05	-.53	-.25	-.05	.14	-.20	-.12	.03	.16	-.04	-.02
<u>CC</u>	.22	.01	-.26	-.55	-.16	.12	-.18	-.25	.26	-.05	.02	.08
<u>FL</u>	.00	-.03	.01	.06	-.24	.13	-.08	-.09	-.08	.20	-.04	-.07
<u>A</u>	.04	.00	.09	.06	-.06	-.49	.16	.02	-.14	.13	.21	.15
<u>I</u>	-.05	-.02	-.08	-.07	.00	.23	-.56	.04	.17	.04	.06	.07
<u>F</u>	.03	-.06	-.04	-.04	.12	-.01	.01	-.44	-.06	.02	.16	.30
<u>L</u>	-.12	-.10	-.23	-.16	-.01	.15	.01	.01	-.23	.00	.04	-.01
<u>E</u>	.10	-.08	.08	-.08	-.06	.00	.03	.17	.09	-.46	.05	.12
<u>R</u>	-.08	.09	.08	.08	.03	.04	.27	.02	-.12	.24	-.48	-.13
<u>P</u>	.03	.14	.15	.15	.00	-.01	.17	.05	.04	.14	.08	-.50

- Changes in TSI scores during theological school -

TABLE 18: MEAN SCORES ON TSI SCALES

	Male Theological Students N = 1775		Concordia Students N = 108		Concordia Students N = 143	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
<u>D</u>	55.5	5.4	43.1	3.9	43.3	4.1
<u>NL</u>	50.2	6.9	51.8	6.6	51.2	6.6
<u>SL</u>	49.4	8.7	48.1	6.3	47.7	6.5
<u>CC</u>	49.9	7.9	48.9	6.3	49.0	6.3
<u>FL</u>	53.2	7.2	46.2	6.3	46.7	6.4
<u>A</u>	8.5	5.2	11.2	5.6	10.7	5.5
<u>I</u>	11.9	5.2	8.0	4.7	8.2	4.6
<u>F</u>	11.9	5.3	10.4	4.9	10.4	5.1
<u>L</u>	11.0	4.5	10.4	4.0	10.7	4.0
<u>E</u>	14.4	6.5	19.3	4.7	19.2	4.9
<u>R</u>	11.3	4.4	8.5	3.4	8.6	3.3
<u>P</u>	14.6	4.2	13.1	3.5	13.2	3.6

Table 19: SIGNIFICANT CORRELATION BETWEEN CHANGES IN TSI SCORES
AND MISCELLANEOUS VARIABLES

Between changes in D and

Number of children	.24
Others from home church in ministry	-.25
Feels comfortable about demand for scholarly interest (on entering seminary)	.24
Feels comfortable about demand to work with those with physical or mental illness (on leaving seminary)	.26
Interest in parish ministry	-.26
Increased interest in parish ministry	.23
Interest in missions	.21

Between changes in NL and

Influenced in decision for ministry by teachers	.19
Feels comfortable about demand for public speaking (on entering seminary)	-.28
Feels comfortable about demand for administrative work (on entering seminary)	-.20
Feels comfortable about demand for scholarly interest (on leaving seminary)	.20
Feels comfortable about demand for dynamic leadership (on leaving seminary)	.22
Military occupation as alternative	.29

Between changes in CC and

Feels comfortable about demand for leadership in social- racial problems (on entering seminary)	-.23
Feels comfortable about demand for scholarly interest (on entering seminary)	-.26

Between changes in SL and

Feels comfortable about demand to work with those with restricted intellectual interests (on entering seminary)	.19
Feels comfortable about demand for scholarly interest (on leaving seminary)	-.20
Interest in parish ministry	.19
Interest in teaching	-.22

Between changes in FL and

Mother a college graduate	.23
Parents separated or divorced	-.29
Change in marital status during seminary	-.27
Rated conservativeness of home church	.20
Previous parish experience	-.22
Feels comfortable about demand to work with those with restricted intellectual interests (on leaving seminary)	-.19
Increased interest in ministry of religious education	-.28
Interest in teaching	-.25
Aesthetic courses among disliked	.22
Literary occupation as alternative	.26

Between changes in A and

Previous graduate school	.29
Age at which final decision for ministry was made	.21
Feels comfortable about demand for leadership in social-racial problems (on leaving seminary)	-.23
Father in organization occupation	.20

Between changes in I and

Change in marital status during seminary	-.25
Age at which final decision for ministry was made	-.19
Feels comfortable about demand to work with those with physical or mental illness (on leaving seminary)	-.22
Skills courses among best liked	.21
Structure of society courses among disliked	-.20
Language courses among disliked	.20
Placement in non-pastoral religious work	.21

Between changes in F and

Change in marital status during seminary	-.28
Rated adequacy of home religious training	-.19
Influenced in decision for ministry by family	-.19
Influenced in decision for ministry by teachers	.19
Feels comfortable about demand for administrative work (on entering seminary)	-.20
Language courses among best liked	-.25

Between changes in L and

Feels comfortable about demand to work with those with restricted intellectual interests (on leaving seminary)	-.25
Feels comfortable about demand for dynamic leadership (on leaving seminary)	-.22
Organization as an alternative occupation	.23

Between changes in E and

Feels comfortable about demand for leadership in social-racial problems (on entering seminary)	-.27
Interest in ministry of religious education	.29
Structure of society courses among best liked	-.23

Between changes in R and

Father active in home church	.27
Rated adequacy of church's religious training	.23
Feels comfortable about demand for making sacrifices (on leaving seminary)	.22
Feels comfortable about demand to work with those with physical or mental illness (on leaving seminary)	.19
Feels comfortable about demand for leadership in social-racial problems (on leaving seminary)	.22
Feels comfortable about demand for dynamic leadership (on entering seminary)	.22
Feels comfortable about demand for dynamic leadership (on leaving seminary)	.20
Language courses among best liked	.19
Law as an alternative occupation	.19

Between changes in \underline{P} and

Self-rating of emotional health	.19
Influenced in decision for ministry by family	.20
Feels comfortable about demand for leadership in social- racial problems (on leaving seminary)	.23
Feels comfortable about demand for scholarly interests (on entering seminary)	.24
Increased interest in ministry of religious education	-.29
Skills courses among best liked	-.32
Father in organization occupation	-.21
Public service occupation as alternative	-.19

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